



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

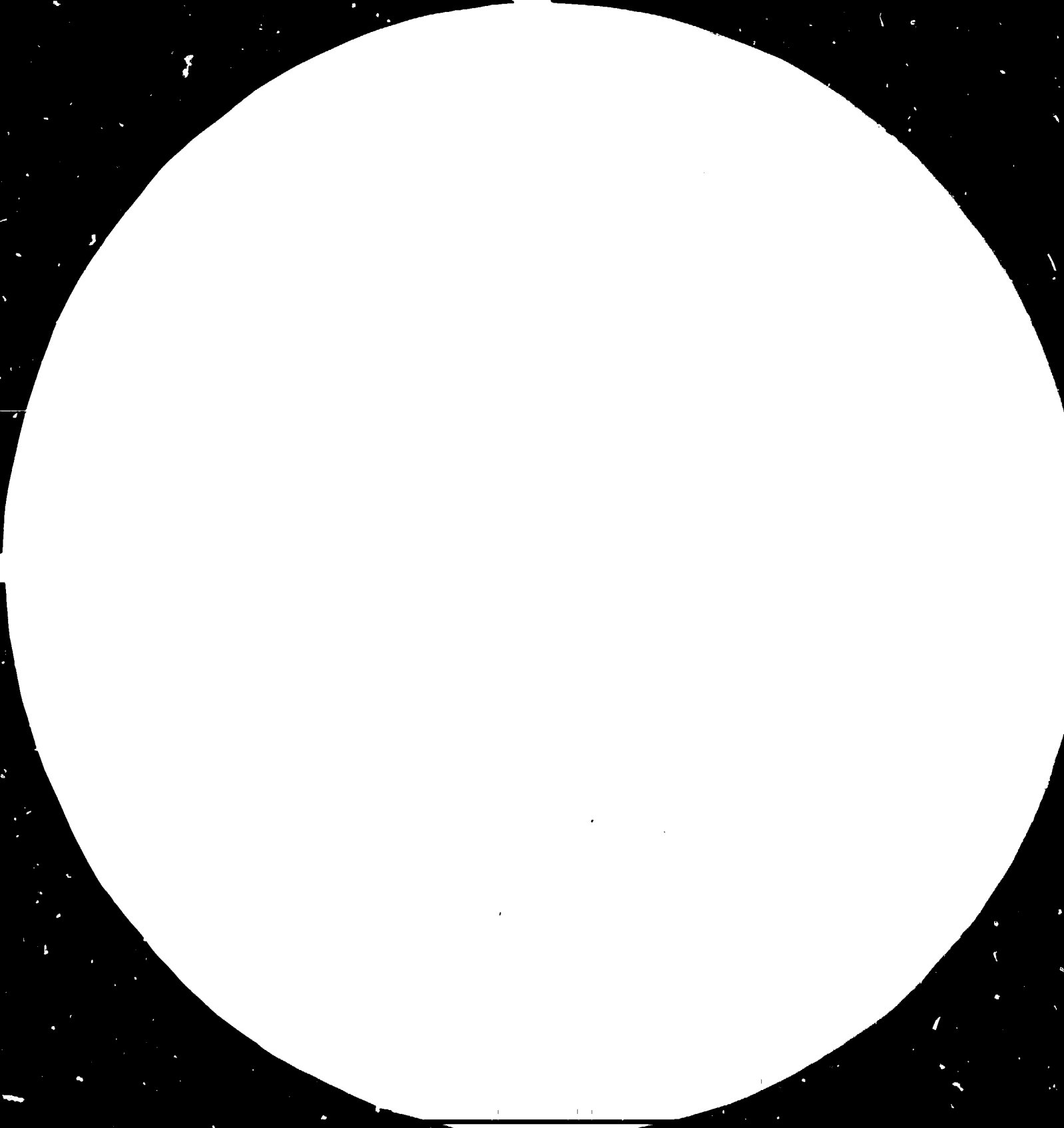
FAIR USE POLICY

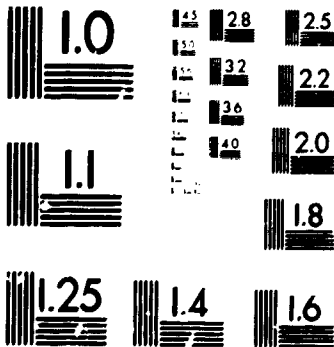
Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)



12826



Distr.
LIMITED

ID/WG.393/2/Rev.1
5 November 1984

ENGLISH *

United Nations Industrial Development Organization

Second Consultation on the
Pharmaceutical Industry,
Budapest, Hungary
21-25 November 1983

DIRECTORY OF SOURCES OF SUPPLY OF PHARMACEUTICAL
CHEMICALS, THEIR INTERMEDIATES AND SOME RAW
MATERIALS INCLUDED IN THE UNIDO LIST **

Prepared by
the UNIDO secretariat

* With foreword, introduction, definitions and questionnaire in French and Spanish.

** This document has been reproduced without formal editing.

2840

V.84 92465

FOREWORD

The Lima Declaration and Plan of Action adopted at the Second General Conference of UNIDO, in March 1975 called for an increase in the share of the developing countries to at least 25 per cent of total world industrial production by the year 2000, and recommended that UNIDO should establish a system of continuing consultations between developed and developing countries to help achieve this goal. This recommendation was endorsed by the United Nations General Assembly at its VII Special Session in September of the same year. Following the General Assembly's decisions, the system of industrial consultations was designed with the objective of developing a new dimension to international cooperation in the field of industry.

The system was launched by UNIDO in January 1977. One of the priority industries for Consultation was the Pharmaceutical Industry which protects the health of populations and supports along with food the socio-economic foundations of economic development. Preparatory work for the First Consultation on the Pharmaceutical Industry was started in July 1977 by convening the first meeting of Panel of Experts in Vienna. The System of Consultation during its preparatory work in the sector of pharmaceuticals identified major problems which affected both the development of viable pharmaceutical industry as well as technical assistance programmes of UNIDO in the developing countries. It was realized that the problems cannot be overcome without understanding, collaboration and action at international level.

In addition to other issues, the First Consultation held in December 1980 in Lisbon, Portugal, considered the issue of Availability and Pricing of Essential Bulk Drugs (Pharmaceutical Chemicals) and their Intermediates. Among the constraints to the development of this industry, in developing countries, wide disparity in prices charged for the bulk drugs (pharmaceutical chemicals) required for production of pharmaceutical dosage forms, high prices of intermediates required for the production of pharmaceutical chemicals and problems in acquiring technology are of great significance.

The variation and high prices of bulk drug (pharmaceutical chemicals) and their intermediates has shown direct impact on the prices of pharmaceutical dosage forms which in turn has adversely affected the ability of the developing countries to provide pharmaceutical drugs at reasonable prices to the vast majority of their population.

The First Consultation on the Pharmaceutical Industry, after review of the issue, acknowledged the impact of the issues of availability and pricing of pharmaceutical chemicals and technology on the development and viability of pharmaceutical industry in developing countries and recommended the establishment of a Committee of Experts from developing and developed countries including representatives of manufacturers of those intermediates and pharmaceutical chemicals which have limited sources of supply. The Committee was assigned to discuss technical and economic aspects of availability with a view to make recommendations to overcome these problems.

In October 1982 the Committee of Experts discussed the complexity of the issue relating to availability and pricing. It analyzed the problem of disparity and high prices which affect developing countries particularly the least developed ones where the dosage forms industry is either in early stages of development or yet to be developed. In order to circumvent these problems, the Committee endorsed dual action on one hand compiling a Directory of Sources of Supply to assist the formulation industry in attaining improved economic viability and on the other hand local production in developing countries of pharmaceutical chemicals and more specifically, the intermediates through transfer of technology.

Accordingly, a Directory covering 26 selected pharmaceutical chemicals and their intermediates was prepared by UNIDO and presented to the Second Consultation. It provides wider information with regard to global sources of supply lending strength and healthy competition in the negotiation capacity through international bidding. The Second Consultation recognized the usefulness of the Directory in overcoming the problems and recommended its revision, wide distribution to developing countries, periodic updating and gradual expansion to cover all the pharmaceutical chemicals included in WHO model list of essential drugs.

In compliance with the recommendations of the First and Second Consultation on the Pharmaceutical Industry, the Directory covering 26 pharmaceutical chemicals and their intermediates has now been updated.

UNIDO believes the Directory is valuable reference source for the purchaser of pharmaceutical chemicals in bringing transparency in enlarging trade collaboration resulting in economic buying and production which would

ultimately result in improved health programming. It is hoped, this document will find wider reference and be used by concerned authorities and professionals in developing and developed countries and also international organizations.

The users' response as to the positive contribution of this document in their procurement, bargaining capacities and eventual impact on their production cost will in turn be an acknowledgement to the members of the Committee of Experts and serve as a support for UNIDO in their work.

UNIDO wishes to acknowledge with thanks the cooperation afforded by manufacturers/suppliers and associations of pharmaceutical chemicals and their intermediates which enabled it to accomplish the task of compilation of this Directory.

PREAMBULE

La Déclaration et le Plan d'action de Lima adoptés à la deuxième Conférence générale de l'ONUDI en mars 1975 proclamaient la nécessité de porter la part des pays en développement à au moins 25 % du total de la production industrielle mondiale d'ici à l'an 2000 et recommandaient que l'ONUDI mette en place un système de consultations permanentes entre les pays développés et les pays en développement pour atteindre cet objectif. Cette recommandation a été approuvée par l'Assemblée générale des Nations Unies à sa septième session spéciale en septembre de la même année. C'est pour donner suite aux décisions de l'Assemblée générale qu'a été conçu le Système de consultations industrielles destiné à conférer une dimension nouvelle à la coopération internationale dans le domaine de l'industrie.

Ce système a été lancé par l'ONUDI en janvier 1977. Parmi les industries prioritaires qui ont été retenues figurait l'industrie pharmaceutique, qui protège la santé des populations et, avec l'alimentation, constitue un des piliers socio-économiques du développement économique. Les travaux préparatoires en vue de la première Consultation sur l'industrie pharmaceutique ont commencé en juillet 1977 par la convocation de la première réunion du Groupe d'experts à Vienne. Ces travaux préparatoires ont permis d'identifier les principaux problèmes qui étaient à résoudre pour la création d'une industrie pharmaceutique viable, ainsi que pour la mise en oeuvre de programmes d'assistance technique de l'ONUDI dans les pays en développement. Il est apparu que ces problèmes ne pouvaient être surmontés que par un effort de compréhension et une collaboration et une action au niveau international.

La première Consultation qui s'est tenue en décembre 1980 à Lisbonne, Portugal, a examiné, entre autres, la question du prix et de la disponibilité des médicaments essentiels en vrac (produits chimiques à usage pharmaceutique) et des produits intermédiaires. Les fortes disparités des prix pratiqués pour les médicaments en vrac (produits chimiques à usage pharmaceutique) nécessaires pour la fabrication de produits pharmaceutiques, le prix élevé des produits intermédiaires nécessaires pour la production de formes pharmaceutiques et les difficultés d'acquisition des technologies, entre autres, sont apparus comme des obstacles de taille au développement de l'industrie pharmaceutique dans les pays en développement.

Les variations et le niveau élevé des prix des médicaments en vrac (produits chimiques à usage pharmaceutique) et leurs produits intermédiaires ont une répercussion directe sur le prix des formes pharmaceutiques qui empêche les pays en développement de mettre à la disposition de la grande majorité de leur population des produits pharmaceutiques à des prix raisonnables.

La première Consultation sur l'industrie pharmaceutique, après examen de cette question, a pris note de l'importance des questions de la disponibilité et du prix des produits chimiques pharmaceutiques et de la technique pour le développement et la viabilité de l'industrie pharmaceutique dans les pays en développement et a recommandé la création d'un Comité d'experts composé de représentants des pays en développement et des pays développés comprenant des représentants des fabricants de produits intermédiaires et de produits chimiques à usage pharmaceutique dont les sources d'approvisionnement sont limitées. Le Comité a été chargé d'examiner les aspects techniques et économiques de l'approvisionnement en produits de ces deux catégories et de formuler des recommandations sur la manière de résoudre les problèmes qu'il soulève.

En octobre 1982, le Comité d'experts a discuté de cette question complexe de la disponibilité et des prix. Il a analysé le problème des disparités et du niveau élevé des prix qui se pose pour les pays en développement, en particulier les pays les moins développés dont l'industrie pharmaceutique est encore embryonnaire ou inexistante. Pour surmonter ces problèmes, le Comité a recommandé une action dans deux directions sous la forme, d'une part, de la compilation d'un répertoire des sources de médicaments essentiels en vrac destiné à aider l'industrie pharmaceutique à améliorer sa viabilité économique et, d'autre part, d'une production locale dans les pays en développement de produits chimiques à usage pharmaceutique, plus particulièrement de produits intermédiaires, grâce au transfert de technologies.

Un répertoire portant sur 26 produits chimiques à usage pharmaceutique et leurs produits intermédiaires a donc été établi par l'ONUDI et présenté à la deuxième Consultation. Ce document fournit des renseignements plus complets sur les sources d'approvisionnement existantes dans le monde et ouvre des possibilités supplémentaires de négociation en permettant aux

acheteurs de susciter une saine concurrence par le moyen d'appels d'offres internationaux. La deuxième Consultation a reconnu l'utilité de ce répertoire et a recommandé qu'il soit révisé, largement diffusé dans les pays en développement, remis périodiquement à jour et progressivement élargi à tous les produits chimiques à usage pharmaceutique figurant sur la liste des médicaments essentiels de l'OMS.

Conformément aux recommandations de la première et de la deuxième Consultation sur l'industrie pharmaceutique, le répertoire portant sur 26 médicaments en vrac et leurs produits intermédiaires correspondants a donc été remis à jour. L'ONUDI pense offrir ainsi un document de référence utile aux acheteurs de produits chimiques à usage pharmaceutique qui, en favorisant une transparence et une coopération accrue, permettra des économies à l'achat et à la production qui se traduiront finalement par une amélioration des programmes de santé. Elle espère que ce document sera de plus en plus largement utilisé, tant par les autorités et les spécialistes des pays en développement et des pays développés que par les organisations internationales.

Les membres du Groupe d'experts s'estimeront récompensés et l'ONUDI sera encouragée dans son action si les utilisateurs de ce document lui réservent un accueil favorable et y trouvent un moyen de faciliter leurs achats, d'améliorer leur capacité de négociation et de réduire finalement leurs coûts de production.

L'ONUDI remercie de leur coopération les fabricants/fournisseurs de produits chimiques pharmaceutiques et de produits intermédiaires, ainsi que leurs associations qui l'a permis la réalisation de ce répertoire.

PROLOGO

En la Declaración y Plan de Acción de Lima aprobados en la Segunda Conferencia General de la ONUDI, celebrada en marzo de 1975, se pidió que la participación de los países en desarrollo aumentase por lo menos al 25% del total de la producción industrial mundial para el año 2000, y se recomendó que la ONUDI estableciera un sistema de consultas continuas entre los países desarrollados y los países en desarrollo para ayudar a alcanzar esta meta. La Asamblea General de las Naciones Unidas hizo suya esa recomendación en su séptimo período extraordinario de sesiones, celebrado en septiembre del mismo año. De conformidad con las decisiones de la Asamblea General, el sistema de consultas industriales fue diseñado con la finalidad de dar una nueva dimensión a la cooperación internacional en la esfera industrial.

La ONUDI inició el sistema en enero de 1977. Una de las industrias prioritarias para la celebración de consultas fue la industria farmacéutica, que protege la salud de la población y apoya, conjuntamente con la alimentación, las bases socioeconómicas del desarrollo económico. La labor preparatoria para la Primera Consulta sobre la Industria Farmacéutica comenzó en julio de 1977 con la primera reunión del Grupo de Expertos, que se efectuó en Viena. El Sistema de Consultas, durante su labor preparatoria en la esfera de los productos farmacéuticos, identificó importantes problemas que afectaban el desarrollo de una industria farmacéutica viable, así como los programas de asistencia técnica de la ONUDI en los países en desarrollo. Quedó en claro que los problemas sólo podían resolverse mediante la comprensión, la colaboración y la adopción de medidas a nivel internacional.

Además de otras cuestiones, en la Primera Consulta, celebrada en diciembre de 1980 en Lisboa (Portugal), se analizó el problema de la disponibilidad y el precio de los medicamentos esenciales a granel (productos químicos farmacéuticos) y sus productos intermedios. Entre los obstáculos importantes que se oponen al desarrollo de esta industria en los países en desarrollo están la amplia disparidad de los precios que se fijan a los medicamentos a granel (productos químicos farmacéuticos) necesarios para la producción de formas farmacéuticas dosificadas, los altos precios de los

productos intermedios que se precisan para la fabricación de productos químicos farmacéuticos y los problemas de la adquisición de tecnología.

La variación y los altos precios de los medicamentos a granel (productos farmacéuticos) y sus productos intermedios ha repercutido directamente en los precios de las formas farmacéuticas dosificadas, lo que, a su vez, ha afectado negativamente la capacidad de los países en desarrollo para suministrar medicamentos farmacéuticos a precios razonables a la amplia mayoría de su población.

En la Primera Consulta sobre la Industria Farmacéutica, luego de examinarse la cuestión, se reconoció el efecto que tenían así la disponibilidad y el precio de los productos químicos farmacéuticos como la tecnología en el desarrollo y viabilidad de la industria farmacéutica de los países en desarrollo, y se recomendó el establecimiento de un Comité de Expertos de los países en desarrollo y los países desarrollados que contara con la participación de representantes de los fabricantes de esos productos intermedios y productos químicos farmacéuticos cuyas fuentes de suministro son limitadas. Se encomendó al Comité la tarea de analizar los aspectos técnicos y económicos de la disponibilidad con miras a formular recomendaciones para superar esos problemas.

En octubre de 1982, el Comité de Expertos examinó la complejidad de la cuestión relativa a la disponibilidad y los precios. Analizó el problema de la disparidad y los altos precios que afectan a los países en desarrollo, en especial los menos adelantados, donde la industria de formas dosificadas está en sus primeras etapas de desarrollo o aún no se ha iniciado. Para ayudar a resolver tales problemas, el Comité fue partidario de que se aplicaran dos tipos de medidas: por una parte, la compilación de una Guía de Fuentes de Abastecimiento para ayudar a la industria de formulación a hacerse económicamente más viable y, por otra, la producción local en los países en desarrollo de productos químicos farmacéuticos y, más concretamente, de productos intermedios, mediante la transferencia de tecnología.

En consecuencia, la ONUDI preparó una Guía de 26 productos químicos farmacéuticos seleccionados y sus productos intermedios, que presentó a la Segunda Consulta. Este documento ofrece una información más amplia con respecto a las fuentes de suministro mundiales, a fin de inyectar vigor y una sana competencia en la capacidad de negociación mediante la licitación internacional.

En la Segunda Consulta se reconoció la utilidad de la Guía para superar los problemas y se recomendó su revisión, su amplia distribución entre los países en desarrollo, su actualización periódica y su expansión gradual para que abarcara todos los productos químicos farmacéuticos que la OMS incluye en su lista modelo de medicamentos esenciales.

De conformidad con las recomendaciones de las Consultas primera y segunda sobre la Industria Farmacéutica, ahora se ha actualizado la Guía de 26 productos químicos farmacéuticos y sus productos intermedios.

La ONUDI considera que la Guía constituye una valiosa fuente de consulta para el comprador de productos químicos farmacéuticos, ya que ayuda a lograr la transparencia en una colaboración comercial cada vez más amplia y hace más económicas la compra y la producción, lo que en última instancia mejoraría la programación de la salud. Es de esperar que este documento encuentre una mayor resonancia y que sea de utilidad tanto para las autoridades interesadas y los profesionales de los países en desarrollo y los países desarrollados como para las organizaciones internacionales.

La respuesta de los usuarios en cuanto a la contribución positiva de este documento en cuanto a sus adquisiciones, su capacidad de negociación y la posible repercusión en sus costos de producción será, a su vez, una forma de reconocimiento a los miembros del Comité de Expertos y servirá de apoyo al trabajo que realiza la ONUDI al respecto.

La ONUDI desea agradecer la cooperación que han brindado los fabricantes/proveedores y las asociaciones de productos químicos farmacéuticos y productos intermedios la que le permitió cumplir la tarea de recopilar esta Guía.

CONTENTS

	<u>Page</u>
FOREWORD	
English	i
French	iv
Spanish	vii
INTRODUCTION	
English	xiii
French	xv
Spanish	xviii
<u>SECTION I</u>	
<u>Manufacturers/Suppliers of pharmaceutical chemicals (bulk drugs)</u>	
<u>with quality protocol and miscellaneous details</u>	
Acetylsalicylic acid	1
Ampicillin	3
Ascorbic Acid	6
Benzyl Penicillin	8
Chloroquine Phosphate	10
Dapsone	12
Diethylcarbamazine	13
Erythromycin	14
Ethambutol	16
Ethinylestradiol + Norgestrel (Levo)	18
Furosemide	19
Hydralazine	21
Hydroxocobalamin	22
Insulin	24
Isoniazid	25
Mebendazole	27
Paracetamol	28
Piperazine	30
Plasma Fractions	32
Primaquine	33
Propranolol	34
Reserpine	35
Retinol	36
Streptomycin Sulphate	37
Sulphadimidine	39
Tetracycline	41

SECTION IIManufacturers/Suppliers of chemical intermediates and some raw materials to produce pharmaceutical chemicals

Acetic Anhydride	43
Acetyl Acetone	44
Acetanilid	44
Alpha-Napthol	45
6 Amino Penicillanic Acid	46
P Aminophenol	47
D-2-Aminobutanol	48
P-Anisidine	48
M Chloroaniline	49
Chloroanthranilic Acid	49
P Chloronitrobenzene	50
Chlorosulphonic Acid	51
3:4 Diaminobenzo-phenone	51
4:4 Dichlorodiphenylsulfone	52
4:6 Dichlor-3 Sulfamoylbenzoic Acid	52
4:7 Dichloroquinoline	53
Dicyandiamide	53
Diethylcarbamylochloride	54
Diethyl-Ethoxy Methylene Malonate Ester	54
N:N Dimethylaniline	55
Diphenyloxide	55
Epichlorohydrin	56
Erythromycin Thiocynate	56
Estrone/Estradiol and Salts/Esters	57
Ethylene Chloride/Ethylene Diamine Hydrochloride	57
Ethylene Dichloride	58
Gamma Picoline	58
Guanidine Nitrate	59
Hydrazine Hydrate	60
Isonicotinic Acid	60
Isopropylamine	61
Methylchloroformate	61
1 Methylpiperazine Hydrochloride	62
P Methoxy-o-Nitraniline	62
Mono ethanolamine	63
1:4 Nitrobenzene	64
Novaldiamine (1 Diethylamino 4-amino pentane)	64
Phthalazone	65
D Phenylglycine	65
Salicylic Acid	66
Sorbitol	67
Sulfanilic Acid	68
Sulphurylchloride	68
Sulphaguanidine	69
Tetracycline Arquad Salt/Tetracycline Urea Complex/ Demethylchlortetra Cycline Urea Complex	69

SECTION III

Addresses, telephone and telex numbers of
Manufacturers and Suppliers

	<u>Page</u>
ABBREVIATIONS AND DEFINITIONS	
English	93
French	95
Spanish	97
LIST OF PHARMACEUTICAL CHEMICALS, THEIR INTERMEDIATES AND RAW MATERIALS INCLUDED IN THIS DIRECTORY	99
QUESTIONNAIRE	
English	103
French	104
Spanish	105

INTRODUCTION

The First Consultation on the Pharmaceutical Industry held in Lisbon, Portugal in December 1980 discussed the issue of Pricing and Availability of Bulk Drugs (Pharmaceutical Chemicals) and their intermediates. It recommended establishment of a Committee of Experts on Pharmaceuticals with due geographical representation including countries with major pharmaceutical industries to make an in-depth study of related technical and economic aspects. There was also a general consensus for compilation of a Directory of Sources of Supply.

In order to define the scope of work to be undertaken by the Committee of Experts on the issue under reference, UNIDO convened a Round Table Meeting in Mohammedia, Morocco in December 1981. This meeting also suggested that UNIDO should endeavour to provide information on indicative prices when requested by a developing country.

The Committee of Experts met in Paris, France in October 1982 in accordance with the recommendations of First Consultation and held deliberations on the issue of Pricing and Availability. Apart from other conclusions the Committee endorsed the compilation of Directory and suggested that distinction should be made between manufacturers and suppliers and quality specifications should be included.

The Directory covering 26 (including plasma fractions) bulk drugs (pharmaceutical chemicals), was reviewed by the Second Consultation on the Pharmaceutical Industry held in Budapest, Hungary, in November 1983 recommending its revision and wider distribution to interested countries, and thereafter its annual updating and progressive enlargement to cover the full WHO model list of essential drugs (pharmaceutical chemicals).

Since there has been some misunderstanding in differentiating the meaning of essential drugs and bulk drugs, it was deemed necessary to introduce more clear definitions. The terms Pharmaceutical Drugs and Pharmaceutical Chemicals therefore have been introduced in place of essential drugs and bulk drugs. This new terminology has been incorporated in this Directory with comprehensive definitions.

Although some directories of chemical producers already exist, this is the first attempt to compile a directory of suppliers of bulk drugs (pharmaceutical chemicals) and some of their intermediates from both developed and developing countries.

The information contained in this Directory was collected through direct contact with manufacturers/suppliers in various countries, national manufacturer associations, the International Federation of Pharmaceutical Manufacturers Association and also from published sources. Information on quality specifications has been incorporated where it was made available.

Although care has been taken to ensure that the information is accurate, complete and up-to-date as on 31 August 1984, UNIDO cannot ensure that all sources of supply have been included; each producer is still continuing production of the product enlisted; and the mailing and telex addresses given are still the most recent ones.

UNIDO will continue to update and progressively enlarge the Directory. A questionnaire has been appended to this document for the convenience of the users in order to make suggestions. It is requested that manufacturers/suppliers not included in this document may extend their cooperation in making it more comprehensive by furnishing their particulars.

The Directory has been divided into three sections to facilitate information retrieval by its users.

In Section I a comprehensive list of sources of supply of each of the selected pharmaceutical chemicals has been compiled. For each chemical the synonyms, reference to specifications and details regarding storage requirements have been given. A distinction has been made between "a source of supply" which includes international trading houses, brokers and sales agents, i.e. "a supplier", and a manufacturer/supplier of the product. The former has been marked by an asterisk (*), while the latter has been marked by two asterisks (**). Where no indication is shown, no specific information as to the status was received from the source.

In Section II a comprehensive list of sources of supply of the major raw materials and intermediates required for the manufacture of the 26 pharmaceutical chemicals included in the UNIDO/WHO illustrative list, is provided. Emphasis has been placed on the more important intermediates, and those for which there are only a few suppliers. The more common chemicals and solvents which are readily available and are widely used have NOT been included.

While in Sections I and II only the names of manufacturers/suppliers and the countries of origin have been indicated, in Section III the full address, telephone and telex numbers of each manufacturer/supplier is provided as far as it is accurately available at the time of issuing the Directory.

The definitions and abbreviations explaining various terms have been included in the document.

INTRODUCTION

La première Consultation sur l'industrie pharmaceutique tenue à Lisbonne, Portugal, en décembre 1980 a examiné la question du prix et de la disponibilité des médicaments en vrac (produits chimiques à usage pharmaceutique) et de leurs produits intermédiaires. Elle a recommandé la création d'un comité d'experts en produits pharmaceutiques représentant tous les groupes géographiques et notamment les pays dotés d'une importante industrie pharmaceutique, qui seraient chargés d'une étude approfondie des aspects techniques et économiques de cette question. Il y a également été décidé, par consensus, de dresser un répertoire des sources d'approvisionnement.

Dans le but de définir la tâche ainsi confiée au Comité d'experts, l'ONUUDI a convoqué une Table ronde qui s'est réunie à Mohammedia, Maroc, en décembre 1981. Celle-ci a suggéré que l'ONUUDI s'efforce également de fournir des renseignements sur les prix indicatifs aux pays en développement qui en feraient la demande.

Conformément aux recommandations de la première Consultation, le Comité d'experts s'est réuni à Paris, France, en octobre 1982 et a étudié la question des prix et de la disponibilité. Il a, entre autres, approuvé le texte du répertoire, tout en suggérant de faire une distinction entre fabricant et fournisseur et de faire figurer des informations concernant les normes de qualité.

Le répertoire portant sur 26 médicaments en vrac (produits à usage pharmaceutique) a été soumis à la deuxième Consultation sur l'industrie pharmaceutique tenue à Budapest, Hongrie, en novembre 1983 qui a recommandé qu'il soit révisé et largement diffusé aux pays intéressés et, par la suite, mis à jour chaque année et progressivement augmenté pour englober tous les médicaments essentiels (produits chimiques à usage pharmaceutique) figurant sur la liste type de l'OMS.

La distinction entre les médicaments essentiels et les médicaments en vrac ayant donné lieu à certains malentendus, il a été jugé nécessaire d'en donner des définitions plus précises. Les expressions "médicaments essentiels" et "médicaments en vrac" ont donc été respectivement remplacées par "produits pharmaceutiques" et "produits chimiques à usage pharmaceutique". Cette terminologie nouvelle figure dans le présent répertoire accompagné de définitions très complètes.

Il existe déjà certains répertoires de fournisseurs de produits chimiques, mais c'est la première fois qu'il a été essayé d'établir un répertoire de fournisseurs de médicaments en vrac (produits chimiques à usage pharmaceutique) et de certains de leurs produits intermédiaires dans les pays développés et dans les pays en développement.

Les renseignements contenus dans ce répertoire ont été obtenus directement auprès des industriels/fournisseurs de divers pays, des associations nationales de fabricants, de la Fédération internationale de l'industrie du médicament, ou tirés de diverses publications. Dans la mesure du possible, on a fait figurer des informations concernant les normes de qualité.

L'ONUDI s'est efforcée de donner des informations exactes et à jour à la date du 31 août 1984, mais il ne lui est pas possible de garantir que tous les fournisseurs ont été cités, que chaque producteur fabrique encore les produits cités, et que les adresses et numéros de télex cités sont les plus récents.

L'ONUDI continuera de mettre à jour et d'augmenter progressivement ce répertoire. Elle y a joint un questionnaire destiné à permettre à ses utilisateurs de présenter des suggestions. Il est demandé aux industriels/fabricants qui ne figurent pas dans ce document de bien vouloir nous permettre de le compléter en nous fournissant les renseignements les concernant.

Le répertoire a été divisé en trois sections pour faciliter l'utilisation.

La section I contient une liste détaillée des fournisseurs de chacun des produits chimiques à usage pharmaceutique retenus. Chaque fois, les synonymes, les spécifications et les instructions concernant le stockage ont été donnés. Une distinction a été faite entre "une source d'approvisionnement" qui comprend des maisons de commerce international, des courtiers et des agents, c'est-à-dire "des fournisseurs" et un industriel qui vend sa production. Les premiers sont signalés par un astérisque et les deuxièmes par deux astérisques. Dans certains cas - pas d'astérisque - on ne dispose d'aucune information concernant la nature du fournisseur.

La section II contient une liste détaillée des fournisseurs des principales matières premières et des principaux produits intermédiaires nécessaires à la fabrication des 26 produits chimiques pharmaceutiques figurant sur la liste ONUDI/OMS. L'accent a été mis sur les produits

intermédiaires les plus importants et sur ceux pour lesquels les fournisseurs sont peu nombreux. On n'a pas inclus les produits chimiques et les solvants les plus courants pour lesquels il n'y a pas de problèmes d'approvisionnement.

Contrairement aux sections I et II où l'on n'a indiqué que les noms des fabricants/fournisseurs et les pays d'origine, la section III contient l'adresse complète et les numéros de téléphone et de télex de ces fabricants/fournisseurs, établis d'après les informations disponibles au moment de l'établissement du répertoire.

On y trouvera également les définitions et les abréviations relatives aux divers termes utilisés.

INTRODUCCION

En la Primera Consulta sobre la Industria Farmacéutica celebrada en Lisboa (Portugal) en diciembre de 1980 se examinó la cuestión del precio y disponibilidad de los medicamentos a granel (productos químicos farmacéuticos) y sus productos intermedios. Se recomendó la creación de un Comité de Expertos sobre Productos Farmacéuticos con la debida representación geográfica, incluidos los países con las principales industrias farmacéuticas, a fin de efectuar un estudio en profundidad de los aspectos técnicos y económicos conexos. Hubo también consenso general en cuanto a la compilación de una Guía de Fuentes de Abastecimiento.

Para definir el ámbito del trabajo que habría de emprender el Comité de Expertos sobre dicha cuestión, la ONUDI convocó una reunión de mesa redonda en Mohammedia (Marruecos) en diciembre de 1981. En ésta se sugirió también que la ONUDI hiciera todo lo posible por facilitar información sobre los precios indicativos, cuando así lo pidiese un país en desarrollo.

El Comité de Expertos, conforme a las recomendaciones de la Primera Consulta, se reunió en París (Francia) en octubre de 1982 y deliberó sobre la cuestión del precio y la disponibilidad. Además de adoptar otras conclusiones, el Comité apoyó la compilación de la Guía y sugirió que se estableciera una diferencia entre fabricantes y proveedores, y que se incluyeran especificaciones de calidad.

La Guía, que abarcaba 26 medicamentos a granel (incluidas fracciones de plasma), fue revisada por la Segunda Consulta sobre la Industria Farmacéutica celebrada en Budapest (Hungría) en noviembre de 1983; en ésta se recomendó que se revisara y se extendiera su distribución a los países interesados, y que en adelante se actualizara todos los años y se ampliara de manera progresiva hasta abarcar toda la lista modelo de la OMS de medicamentos esenciales (productos químicos farmacéuticos).

Dado que a veces no se ha comprendido bien la diferencia entre los medicamentos esenciales y medicamentos a granel, se estimó que era preciso formular definiciones más claras. Por ende, se han introducido los términos medicamentos farmacéuticos y productos químicos farmacéuticos en lugar de medicamentos esenciales y medicamentos a granel. Esta nueva terminología se ha incorporado en esta Guía junto con definiciones generales.

Aunque ya existen algunas guías de fabricantes de productos químicos, este constituye el primer intento de compilar una guía de proveedores de medicamentos a granel (productos químicos farmacéuticos) y algunos de sus productos intermedios, tanto de los países desarrollados como de los países en desarrollo.

La información que figura en esta Guía fue recopilada mediante contacto directo con fabricantes/proveedores de diversos países, asociaciones nacionales de fabricantes, y la Federación Internacional de Asociaciones de Fabricantes de Productos Farmacéuticos, y también utilizando fuentes ya publicadas. Se ha incorporado información sobre especificaciones de calidad, siempre que ha sido posible obtenerla.

Si bien se ha procurado que la información sea exacta, completa y actualizada hasta el 31 de agosto de 1984, la ONUDI no puede asegurar que se hayan incluido todas las fuentes de abastecimiento, que todos los productores continúan fabricando el producto que aparece en la lista, y que las direcciones postal y de télex siguiesen las más recientes.

La ONUDI seguirá actualizando y ampliando la Guía de manera progresiva. Al presente documento se anexa un cuestionario a fin de que los usuarios puedan formular sus sugerencias. Se pide que los fabricantes/proveedores que no se han incluido en este documento cooperen a ampliarlo suministrando sus datos.

La Guía se ha dividido en tres secciones para facilitar la obtención de información por parte de sus usuarios.

En la Sección I figura una lista general de las fuentes de abastecimiento de cada uno de los productos químicos farmacéuticos seleccionados. Para cada uno de ellos se incluyen sinónimos, referencia a las especificaciones y detalles sobre requisitos de almacenamiento. Se hace una distinción entre "fuente de abastecimiento", que comprende empresas comerciales internacionales, intermedias y agentes de ventas, esto es, "un proveedor" y el producto/proveedor del producto. El primer concepto se ha marcado con un asterisco (*) y el segundo con dos (**). Cuando no hay ninguna indicación, quiere decir que no se ha recibido de la fuente ningún dato concreto sobre su definición.

En la Sección II figura una lista general de las fuentes de abastecimiento de las principales materias primas y productos intermedios necesarios para la elaboración de los 26 productos químicos farmacéuticos que figuran en la lista ilustrativa ONUDI/OMS. Se han destacado los productos intermedios más

importantes y los que tienen sólo unos cuantos proveedores. No se han incluidos los productos químicos y los solventes más corrientes que son de fácil obtención y de utilización general.

Aunque en las Secciones I y II se han indicado solamente los nombres de los productores/proveedores y de los países de origen, en la Sección III figuran la dirección postal completa y los números de teléfono y télex de todos los productores/proveedores de que se disponía con seguridad en el momento de preparar la Guía.

En el documento se incluyen las definiciones y abreviaturas que explican los diversos términos.

SECTION I · PHARMACEUTICAL CHEMICALS (BULK DRUGS)

Therapeutic category: Analgesic and Antipyretic

Name of product: Acetylsalicylic acid

Manufacturers/Suppliers:

Quality specification

*Alfa Intes, Italy	
**Alta Laboratories, India	Ind.P.
*Alwitt, United Kingdom	B.P., E.P., U.S.P.
**Andrha Sugars Ltd., India	Ind.P.
**Angelini, Italy	
*Archemia, Italy	B.P., U.S.P.
**Bayer AG, F.R. Germany	B.P., E.P., U.S.P.
*Becpharm Ltd., United Kingdom	B.P.
*Blau H.G.C., F.R. Germany	B.P., U.S.P.
**Borge Int., USA	
*Chefaro Int. BV, Netherlands	
*Chemapol, Czechoslovakia	B.P., D.A.B., J.A.P., U.S.P.
**Chemproha, Netherlands	E.P., U.S.P., D.A.B.
*Chimimportexport, Romania	B.P., B.P.C., I.P., U.S.P.
**China National Chemicals, China	
**Chemielux, s.à.r.l., Luxemburg	
**CIECH, Poland	B.P., U.S.P.
*Compañía Universal de Industrias, Mexico	
**Daicel Chemical Industries, Japan	B.P., U.S.P., Int.P.
*Dangschat, F.R. Germany	B.P., B.C.P., U.S.P.
*Dolder, Switzerland	B.P., U.S.P.
**Dow Chemicals, USA	
**El Nasr Chem., Egypt	B.P., U.S.P.
*Farmitalia Carlo Erba, Italy	B.P., U.S.P., E.P.
**FBA Pharmaceuticals, USA	U.S.P.
*Flavine Int., USA	
**Graesser Laboratories, United Kingdom (see also Hartington Chemicals, UK)	
*Greef R.W., USA	
**Harbottle Pharm., United Kingdom	
*Helm New York Chemicals, USA	
**Hoechst, F.R. Germany	B.P., E.P.
*ICC Handle, F.R. Germany	
**Industria Química Andina, Columbia	U.S.P., B.P.
**ISF, SpA, Italy	
*Karl O. Helm, F.R. Germany	B.P., U.S.P., E.P.

Acetylsalicylic acid

(continued)

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Lab. Farmacologico, Italy	
*Lars Christensen, Denmark	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
*Marsing, Instel Corp., USA	
*Merck, F.R. Germany	B.P., E.P., U.S.P.
*Mitsui Pharmaceuticals, Japan	
**Monsanto, United Kingdom/Belgium	B.P., E.P.
**Monsanto, USA	U.S.P.
*Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Oy Rohto, Finland	
**Quimica Farmaceutica Platense, Argentina	
**Rhone Poulenc, France	B.P., U.S.P., F.P.
Rhodia, Brazil	
**Roper SpA, Italy	
*Rivopharm, Switzerland	
**Salicilatos, Mexico	B.P., U.S.P., Mex.P.
**Sanofi, France	
*Siemsglüss, F.R. Germany	
**Sterling Drugs, USA	U.S.P.
*Sidney Ross, Brazil	
*Sudamfos, Brazil	
*Transmedica, F.R. Germany	
**Union Fine Chemicals, Korea	

Miscellaneous details:

Synonyms: Acetylsal acid, Acesal, Acetosal, Aspirin, Salicylic acid Acetate, Acetyl-Salol, Acidum Acetylsalicylicum, Polowiryna -0-, 2 Acetoxybenzoic acid.

Specifications: as per recognized compendia.

Descriptions, uses, undesirable effects, etc: Reference Martindale, 28th Edition, pages 235-244, and relevant information as in official compendia.

Storage: Store in airtight containers at Temperature not exceeding 30 degrees C.

Therapeutic category: Antibacterial

Name of product: Ampicillin

Manufacturers/Suppliers:

Quality specification

**Alembic, India	B.P., U.S.P., B.P.C., Ind.P.
*Alwitt, United Kingdom	B.P., E.P., U.S.P.
**Amphray Labs., India	B.P., U.S.P., Ind.P.
**Antibioticos S.A., Spain	B.P., U.S.P.
*Archemia, Italy	B.P., U.S.P., N.F.
**Astra Pharmaceutical, Sweden	B.P.
**Bago Laboratorios, Argentina	
**Bayer AG., F.R. Germany	B.P., Eur.P., U.S.P.
*Becpharm, United Kingdom	
**Beecham, United Kingdom	B.P.
**Biochemie GmbH, Austria	B.P., U.S.P., E.P., J.P.
**Borge International, USA	B.P.
*Chemapol, Czechoslovakia	B.P., D.A.B., J.A.P., U.S.P.
**Chimimportexport, Romania	B.P., B.P.C., I.P., U.S.P.
**China National Chemicals, China	
**Chemielux s.à.r.l., Luxemburg	
**CIECH, Poland	B.P., U.S.P.
**Cipan, Portugal	U.S.P., B.P., B.P.C.
**CIBRAN, Brazil	B.P., U.S.P.
*Commonwealth Serum Labs., Australia	
**Compañía Española de la Penicilina y Antibioticos, Spain	B.P., U.S.P.
**Daicel Chemical Industries, Japan	B.P., U.S.P., I.P.
*Dangschat GmbH., F.R. Germany	B.P., I.P., B.P.C., I.P.
**Deva, Turkey	B.P., U.S.P., Turk.P.
*Dolder, Switzerland	B.P., U.S.P.
*Dott Bonapace, Italy	
**El Nasr, Egypt	B.P., U.S.P.
**Fako, Turkey	
*Farmitalia, Italy	
*FBA Pharmaceuticals, USA	U.S.P.
**Fermentaciones y Síntesis, Mexico	

Antibacterial

(continued)

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
**Fermic, Mexico	
*Sermion Oy, Finland	
**Flamma, Italy	
*Flavine Int., USA	
**Fontoura-Wyeth, Brazil	U.S.P.
**Gist Brocade, Netherlands	
*Greef R.W., USA	B.P., U.S.P.
**Gruppo Lepetit, Italy	B.P., U.S.P.
**Hindustan Antibiotics, India	
**Hoechst, F.R. Germany	B.P., U.S.P.
**IDPL, India	B.P., U.S.P., Ind.P.
**Istituto Biochemico, Italy	
**ISF, Italy	B.P., U.S.P.
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Karl O. Helm, F.R. Germany	
Lab. Farmacologico, Italy	
*Marsing, Denmark	B.P., U.S.P.
Medicuba, Cuba	
**Medimpex, Hungary	
*Meiji-Seka Kaisha, Japan	
Medosan Spa, Italy	
*Mitsui Pharmaceuticals, Japan	
**Mustafa Nevzat, Turkey	B.P.
Orion Pharmaceuticals, Finland	
Orsabe, Mexico	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Pliva, Yugoslavia	B.P., U.S.P.
**Pharmachim, Bulgaria	B.P., U.S.P.
**Proter, Italy	
**Quimica Lorenzini, Brazil	
**Quinonas de Mexico, Mexico	
**Ranbaxy Laboratories, India	
*Rivopharm, Switzerland	
*Sembodja bv, Netherlands	B.P.
Silane Laboratorios, Mexico	U.S.P., Mex.P.

Antibacterial

(continued)

Manufacturers/Suppliers:

Quality specification

**Sintequim, Brazil

*Siemoglüss, F.R. Germany

**Sintesis Quimica S.A., Peru

B.P., U.S.P.

**Société Bristol Meyer, France

**Squibb, USA

Squibb S.p.A., Italy

U.S.P.

*Takeda Chemical Industries, Japan

*Transmedica, F.R. Germany

*Unwin C.W., United Kingdom

**Wyeth Laboratories, USA

**Yang Pharma, South Korea

*Welding GmbH and Co., F.R. Germany

Miscellaneous details:

Synonyms: Anhydrous Ampicillin, Ampicillinum, Aminobenzylpenicillin, Aminobenzylpencillin, 6 R-6-~~CD~~ Phenylglycylamino penicillanic acid.

Specifications: as per recognized official compendia.

Descriptions, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1091-1098 and other relevant information as in official compendia.

Storage: Store in airtight containers at a Temperature not exceeding 25 degrees C. If intended for parenteral administration, the bulk substance and the container should be sterile and sealed to exclude micro-organisms.

Therapeutic category: Vitamin

Name of product: Ascorbic Acid

Manufacturers/Suppliers:

Quality specification

Agvar Chemicals, USA	
*Alfa Intes, Italy	
*Alwitt, United Kingdom	B.P., U.S.P.
American Roland Corp., USA	U.S.P., N.F.
Angelini, Italy	
**Bayer AG, F.R. Germany	B.P., E.P., U.S.P.
**BASF, F.R. Germany	E.P., U.S.P.
*Blau, F.R. Germany	B.P., U.S.P.
Borge International, USA	U.S.P., B.P.
Byron Chemicals, USA	
**Chemielux s.à.r.l., Luxemburg	
**Chemproha, Netherlands	B.P., U.S.P., D.A.B.
**CIECH, Poland	B.P., U.S.P.
**Chimimportexport, Romania	B.P., I.P., U.S.P.
*Compañía Universal de Industrias, Mexico	U.S.P.
*Danochem, Denmark	
*Dangschat GmbH, F.R. Germany	B.P., I.P., B.C.P., U.S.P.
*Dolder, Switzerland	B.P., U.S.P., N.F.
*Fallek Chemicals, USA	
*Flavine Int., USA	
GYMA Laboratories, USA	
**Hindustan Antibiotics Ltd., India	B.P., U.S.P.
**Hindustan Laboratories, India	B.P., U.S.P., Ind.P.
*Hoechst AG, F.R. Germany	U.S.P., E.P.
**F. Hoffmann-La Roche, Switzerland	B.P., U.S.P.
**Hopkin and Williams, United Kingdom	
*ICC Handles, F.R. Germany	
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Karl O. Helm, F.R. Germany	
*Marsing, Denmark	U.S.P., B.P.
*Marsing, USA	
**Merck, F.R. Germany	B.P., E.P., U.S.P.
MWM Chemicals, USA	
Montoil Sarl, France	

Ascorbic Acid

(Continued)

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
**Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P., I.P.
**Organon N.V., Netherlands	
**Oy Rohto, Finland	B.P., U.S.P.
**Pfizer Inc., USA	U.S.P., N.F.
**Pliva, Yugoslavia	
**Pharmachim, Bulgaria	B.P., U.S.P.
*Rivopharm, Switzerland	
**Sarabhai Chemicals, India	
**Sanofi, France	
*Sembodja Holland bv, Netherlands	B.P., U.S.P.
**Siemsglüss, F.R. Germany	
*Synthetic, Denmark	
**Takeda Chemical Industries, Japan	J.P., U.S.P., B.P., E.P.
Transmedica, F.R. Germany	
*Universal Preservechem, USA	
UKemifar, United Kingdom	
**Vitamins Inc., USA	B.P., U.S.P.
**Vit Pharm, Italy	
**Yang Pharma, South Korea	
**YuYu Industrial Co., South Korea	
*Welding GmbH and Co., F.R. Germany	

Miscellaneous details:

Synonyms: Ascorb Acid, Acidum Ascorbicum, Vitamin C, L. Ascorbic Acid, Cevitamic Acid, 3 OXO-L Gulturanolactone (enolic form), Hexuronil acid.

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition pages 1653-1657 and other relevant information as in official compendia.

Storage: Store in airtight container free from contact with metal. Protect from light.

Therapeutic category: Antibacterial

Name of product: Benzyl Penicillin (sodium/potassium)

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
**Alembic, India	B.P., U.S.P., B.P.C., Ind.P.
*Albright and Wilson, United Kingdom	
American Roland, Corp., USA	U.S.P.
**Antibioticos SA, Spain	B.P., U.S.P.
**Bago Laboratories, Argentina	
*Banyo Pharmaceutical, Japan	
**Biochemie GmbH, Austria	B.P., U.S.P., E.P., J.P.
*Blau, F.R. Germany	B.P., U.S.P.
*Chemapol, Czechoslovakia	B.P., I.P., U.S.P.
*Chimimportexport, Romania	B.P., I.P., U.S.P.
**China National Chemicals, China	
**CIECH, Poland	B.P., I.P., U.S.P.
**Cipan, Portugal	B.P., U.S.P., B.P.C.
**Compañía Española de la Penicilina y Antibioticos, Spain	
*Dangschat GmbH, F.R. Germany	B.P., U.S.P., I.P.
*Dolder, Switzerland	B.P., U.S.P., N.F.
*Farmitalia Carlo Erba, Italy	B.P., U.S.P., E.P.
**Fontoura-Wyeth, Brazil	U.S.P.
**Gist Brocade, Netherlands	B.P., U.S.P.
**Glaxochem, United Kingdom (see also Sefton)	B.P.
**Hindustan Antibiotics, India	B.P., U.S.P., Ind.P.
**Hoechst, F.R. Germany	U.S.P., E.P.
**IDPL, India	U.S.P., B.P., E.P., Ind.P.
ISF SpA, Italy	
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
*Medimpex, Hungary	
**Novo Industria, Denmark	
**Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P., I.P.

Benzyl Penicillin

(Continued)

Manufacturers/Suppliers:

Quality specification

**Pfizer International, USA	U.S.P., N.F.
**Pharmachim, Bulgaria	B.P., U.S.P.
**Rhone Poulenc, France	B.P., F.P., I.P., U.S.P.
**Sarabhai, India	
*Sefton, United Kingdom (see also Glaxochem)	B.P., U.S.P.
*Sembodja Holland bv, Netherlands	B.P.
**Squibb and Sons, USA	
Squibb S.p.A., Italy	U.S.P.
Tokyo Tanabe, Japan	
*Transmedica, F.R. Germany	
**Wyeth Laboratories, USA	

Miscellaneous details:

Synonyms: Crystalline Penicillin G, Penicillin, Penicillin G, Sodium or Potassium 3,3 dimethyl 7 OXO 6 phenyl acetamid 3-4-thia-1-azabicyclo (3,2,0) heptane-2 carboxylic acid, Sodium or Potassium -6(2-phenylacetamidopenicellanic acid) Benzyl Penicillin Notricum or Kalicum.

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition pages 1102-1110 and other relevant information as in official compendia.

Storage: Store in airtight container at Temperature not exceeding 25 degrees C. If intended for parenteral administration, the bulk substance and the container should be sterile and sealed to exclude microorganisms.

Therapeutic category: Antimalarial

Name of product: Chloroquine Phosphate

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
*Alwitt, United Kingdom	B.P., U.S.P., E.P.
*American Roland Corp., USA	U.S.P., N.F.
**Angelini, Italy	
**Bayer AG, F.R. Germany	B.P., E.P., U.S.P.
*BEC Chemicals, India	
**Bengal Chemicals, India	
*Biochemie GmbH, Austria	B.P., U.S.P., J.P.
Blau, F.R. Germany	B.P., U.S.P.
**Chemielux s.à.r.l., Luxemburg	
**China National Chemicals, China	
**CIECH, Poland	B.P., U.S.P.
*Daicel Chemical Industries, Japan	
*Dangschat GmbH, F.R. Germany	B.P., U.S.P., I.P.
*Dolder, Switzerland	B.P., U.S.P., N.F.
*FBA Pharmaceuticals, USA	U.S.P., N.F.
**I.C.I., United Kingdom	
**Imperial Chemical Industries, Bangladesh	B.P.
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
*Lab. Farmacologicc, Italy	
*Marsing, Denmark	B.P., U.S.P.
Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P., I.P.
*Pharmachim, Bulgaria	
**Ranbaxy Laboratories, India	B.P., U.S.P., Ind.P.
**Rhone Poulenc, France	B.P., U.S.P., F.P.
*Rivopharm, Switzerland	
Sanofi, France	
*Sembodja Holland bv, Netherlands	B.P.
*Siemsglüss, F.R. Germany	
**Sterling Drugs, USA	
**Sterling Organics, United Kingdom	E.P., B.P., U.S.P.
**Suneeta Laboratories, India	B.P., U.S.P.
*Transmedica, F.R. Germany	B.P., U.S.P.
*R.W. Unwin, United Kingdom	

Chloroquine Phosphate

(continued)

Miscellaneous details:

Synonyms: 7 Chloro-4 (4-diethylamino -1- methylbutylamino) quinoline
Chloroquin Phosphate, Quingazine, Chingaminum, Chloroquin disphosphas.

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: reference Martindale 28th edition,
pages 395-397 and other relevant information as in official compendia.

Storage: Store in well closed container at Temperature not exceeding
25 degrees C. Protect from light.

Therapeutic category: Antileprotic

Name of product: Dapsone

Manufacturers/Suppliers:

Quality specification

**Bengal Chemicals, India	B.P., Ind.P.
*Blau H.C., F.R. Germany	B.P., U.S.P.
**China National Chemicals, China	
*Chimimportexport, Romania	B.P., B.P.C., I.P., U.S.P.
**Cipla, India	
*Dangschat GmbH, F.R. Germany	
*Dolder, Switzerland	
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Karl O. Helm, F.R. Germany	
*Marsing, Denmark	B.P., U.S.P.
*Oxyde Joba, Netherlands	B.P., U.S.P.
*Quimio Produtos Q.I., Brazil	
*Roussel Corporation, USA	
**Roussel Uclaf, France	B.P., U.S.P., F.P., E.P., J.P.
*RSA Corporation, USA	
*Steeley Chemicals, United Kingdom	
*Transmedica, F.R. Germany	
**Wellcome Foundation, United Kingdom	B.P., U.S.P.
*Welding GmbH and Co., F.R. Germany	

Miscellaneous details:

Synonyms: Ddps, Dapsonum, Diaphenylsulfone, DDS, Disulone, Sulphonyldianiline, Bis (4 aminophenyl) Sulphone

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1489-1492, and other relevant information as in official compendia.

Storage: Store in well-closed light-resistant container at room temperature.

Therapeutic category: Antifilarial

Name of product: Diethylcarbamazine

Manufacturers/Suppliers:

Quality specification

*Aceto Chemicals, USA	
*American Cyanamid, USA	
**Amphary Labs, India	B.P., U.S.P., Ind.P.
*Blau H.C., F.R. Germany	B.P., U.S.P.
*Chimimportexport, Romania	B.P., U.S.P.
*Daicel Chemical Industries, Japan	
*Dangschat GmbH, F.R. Germany	B.P., I.P.B., B.C.P., U.S.P.
*Dolder, Switzerland	B.P., U.S.P.
*R.W. Greef, USA	U.S.P.
*Karl O. Helm, USA	
*Hoechst AG, F.R. Germany	B.P., E.P.
**IDPL, India	B.P., Ind.P.
**Kennedy and Klim, USA	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
*Maypro Industries, USA	
*Medimpex, Hungary	
*Orgamol, Switzerland	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Rexolin Chemicals, Sweden	
**Rhone Poulenc, France	B.P., U.S.P., F.P.
*Roussel Uclaf, France	B.P., U.S.P., F.P., E.P., J.P.
*S.S.T. Corporation, USA	
*Transmedica, F.R. Germany	
*K.W. Unwin, United Kingdom	
*Wander Chemie AG, Switzerland	
*Ward Blenkinsop, United Kingdom	
*Welding GmbH and Co., F.R. Germany	

Miscellaneous details:

Synonyms: Diethylcarbam Cit., Diethyl Carbamazini Citras, Ditrazine Citras, Diethylcarbazine Acid Citrate, 1 Diethylcarbamoyl-4- methylpiperazine dihydrogen citrate.

Specifications: as per recognized compendia.

Descriptions, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 91-92 and other relevant information in official compendia.

Storage: Store in air tight containers.

Therapeutic category: **Antibacterial**

Name of product: **Erythromycin**

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
**Abbott Laboratories, USA	U.S.P.
ACIC Ltd., USA	
**Alembic, India	B.P., U.S.P., Ind.P.
**Alimentos Balanceados de Mexico, Mexico	
*American Roland Corp., USA	U.S.P., N.F.
*Archemia, Italy	B.P., U.S.P., N.F.
**Beecham, United Kingdom	B.P., U.S.P., E.P.
**Borge International, USA	B.P., U.S.P., D.A.B., I.P.
Blau H.C., R.F. Germany	
**Compania Española de la Penicilina y Antibioticos, Spain	B.P., U.S.P.
**Chemielux s.à.r.l., Luxemburg	
**CIECH, Poland	B.P., U.S.P.
**Cibran, Brazil	B.P., U.S.P.
**CIPAN, Portugal	B.P., U.S.P.
**Chimimportexport, Romania	B.P., U.S.P., I.P.
**Companhia Brasileira de Antibioticos CIBRAN, Brazil	U.S.P., B.P., F.D.A.
*Dangschat GmbH, F.R. Germany	B.P., I.P., U.S.P.
*Dista Products, United Kingdom	B.P., U.S.P.
*Dolder, Switzerland	B.P., U.S.P., N.F.
*Dott Bonapace, Italy	
*Eli Lilly, USA	
**Fako, Turkey	B.P.
**Fermic SA, Mexico	B.P., U.S.P.
*Flavine International, USA	
*Gyma Laboratories, USA	U.S.P.
*ICC Handle, F.R. Germany	
**IDPL, India	B.P., U.S.P., Ind.P.
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
*Mitsui Pharmaceuticals, Japan	
*Nagasi Company, Japan	
*Orion Pharmaceutica, Finland	

Erythromycin

(continued)

Manufacturers/Suppliers:

Quality specification

*Oxyde Joba, Netherlands	B.P., U.S.P.
**Oy Rohto, Finland	
**Pfizer, USA	
**Pierrel SpA, Italy	
**Priti Chemicals, India	
**Proter, Italy	
*Roussel Uclaf, France	B.P., U.S.P., F.P., E.P., J.P.
*Sembodja Holland bv, Netherlands	B.P.
*Siemsglüss, F.R. Germany	
*S.S.T. Corporation, USA	U.S.P.
**Themis, India	
Transmedica, F.R. Germany	
*Upjohn International, USA	B.P., U.S.P., E.P.

Miscellaneous details:

Synonyms: Erythromycinum, Erithromicina, Erothromycin

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1158-1164 and other relevant information as in official compendia.

Storage: Store in airtight container. Protect from sunlight. If intended for parenteral administration, the bulk substance and the contained should be sterile and sealed to exclude micro-organisms.

Therapeutic category: Antituberculosis

Name of product: Ethambutol

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
**Abbott Laboratories, USA	U.S.P.
**American Cyanamid, USA	
American Roland Corp., USA	U.S.P., N.F.
*Archemia, Italy	B.P., U.S.P., N.F.
**Borge Internaional, USA	B.P., U.S.P., D.A.B., N.F.
**Bracco Industria , Italy	
**Chemielux s.à.r.l., Luxemburg	
*Chimimportexport, Romania	B.P., U.S.P., I.P.
**CIECH, Poland	B.P., U.S.P.
**Cipla, India	
*Dangschat, F.R. Germany	B.P., U.S.P., I.P.
**Deva Holdings, Turkey	
*Dolder, Switzerland	B.P., U.S.P.
**Handok Remedia Ind., South Korea	
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
**Istituto Chemioterapico Italiano, Italy	U.S.P.
**Italsintex, Italy	B.P., U.S.P.
**Laboratorio Gerado Ramon y Cia., Argentina	
**Laboratoires Sobio, France	B.P., U.S.P.
*Lab. Farmacologico, Italy	
Leiras Pharmaceuticals, Finland	
**Lupin Laboratories, India	Ind.P.
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
**Medimpex, Hungary	B.P., U.S.P., J.P.
Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Pierrel, Italy	
**Priti Organics, India	U.S.P., Ind.P.
*Raptakos Brett, India	
*Siemsglüss, F.R. Germany	
Signa, Mexico	
**Themis, India	
*Transmedica, F.R. Germany	
*Vecchi and Piam, Italy	

Ethambutol

(continued)

Miscellaneous details:

Synonyms: Ethambutol Hydrochloride, 2:2 ethylene diminodi 1 butanol, NN Ethylene bis (2 aminobutan 1-ol) dihydrochloride.

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1569-1570, and the relevant information as in official compendia.

Storage: Store in well closed container at temperature not exceeding 30 degrees C.

Therapeutic category: Oral Contraceptive

Name of product: Ethinylestradiol + Norgestrel (Levo)

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
*Alwitt, United Kingdom	B.P., E.P., U.S.P.
*Agvar Chemicals, USA	
*American Roland Corp., USA	
*Chimimportexport, Romania	B.P., U.S.P., I.P.
**CIPLA, India	
*Dangschat, F.R. Germany	B.P., U.S.P., I.P.
**Diosynth, Netherlands	
*Dolder, Switzerland	B.P., U.S.P.
*Dott Bonapace, Italy	
Gador Laboratorios, Argentina	
GYMA Laboratories, USA	
*Medimpex, Hungary	
*Mitsubishi, Japan	
**Organon N.V., Netherlands	
Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P.
*Roussel Uclaf, France	B.P., U.S.P., F.P., E.P., J.P.
**Samil Spa, Italy	B.P., U.S.P.
**Schering AG, F.R. Germany	
*Sembodja Holland bv, Netherlands	B.P.
**Syntex, Mexico	
*Transmedica, F.R. Germany	
Wyeth Labs, USA	

Miscellaneous details: Ethinylestradiol

Synonyms: Ethinyloestradiol, Aethinyloestradiolum, Ethyinyl Estradiol, Ethinylestradiolu m.

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1411-1413, and other information as in official compendia.

Storage: Store in cool place in air-tight non-metallic container. Protect from light.

Miscellaneous details: Norgestrel (Levo)

Synonyms: Levonorgestrel, DL Norgestrel

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1424-1425, and other relevant information as in official compendia.

Storage: Store in cool place in air-tight non-metallic container. Protect from light.

Therapeutic category: Diuretic

Name of product: Furosemide

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
Aceto Chemicals, USA	
*ACIC Ltd., Canada	
**Aché Laboratories, Brazil	
*Agvar Chemicals, USA	
*American Roland Corp., USA	
*Archemia, Italy	B.P., U.S.P., N.F.
*Becpharm Ltd., United Kingdom	B.F.
*H.C. Blau, F.R. Germany	B.P., U.S.P.
**Chemielux s.à.r.l., Luxemburg	
Chimimportexport, Romania	B.P., U.S.P., I.P.
China National Chemicals, China	
**CIECH, Poland	B.P., U.S.P.
Conary Chemicals, USA	
*Dangschat, F.R. Germany	B.P., U.S.P., I.P.
*Dolder, Switzerland	B.P., U.S.P., N.F.
EMA, USA	
**Fabbrica Italiana Sintetici, Italy	B.P., U.S.P., E.P.
**Farmos Group, Finland	B.P., U.S.P., E.P.
Fisons, United Kingdom	
Flavine Int., USA	
GYMA Labs., USA	
Handok Remedia, South Korea	
**Hoechst AG, F.R. Germany	U.S.P., E.P.
ICC Handel, F.R. Germany	
**ICFI SpA, Italy	B.P., U.S.P.
**IDPL, India	B.P., Ind.P.
*K.K. Greef, United Kingdom	B.P., U.S.P.
**Laboratorios Almirall, Spain	
*Lab Farmacologico, Italy	
**Laboratori Mag, Italy	B.P., U.S.P., E.P.
**Leiras Pharmaceuticals, Finland	
*Marsing, Denmark	
**Medimpex, Hungary	U.S.P.
Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Pharmachim, Bulgaria	B.P., U.S.P.
*Plantex, USA	

Furosemide
(continued)

Manufacturers/Suppliers:

Quality specification

*Roussel Corp., USA

*R.W. Greef, USA

*Scharper, USA

*Sembodja Holland bv, Netherlands

B.P.

*S.S.T. Corp., USA

U.S.P.

*Transmedica, F.R. Germany

*R.W. Unwin, United Kingdom

*Welding GmbH and Co., F.R. Germany

Miscellaneous details:

Synonyms: Frusemide, Furosemide, 4 chloro-furfurylamino-5- sulphamoylbenzoic acid,
4 Chloro-N-furfuryl-5-sulphamoyianthranilic acid.

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition,
pages 596 to 600 and other relevant information as in official compendia.

Storage: Store in well closed container. Protect from light.

Therapeutic category: Antihypertensive

Name of product: Hydralazine

Manufacturers/Suppliers

Quality specification

*Alba Chemicals, USA	B.P., U.S.P.
*American Roland Corp., USA	U.S.P., N.F.
*Blau, H.C., F.R. Germany	B.P., U.S.P.
*Bentex Chemicals, USA	
*Chemical Dynamics, USA	
**Ciba Geigy, Switzerland	
*CIECH, Poland	
*Dangschat, F.R. Germany Davos Chemicals, USA	B.P., U.S.P., I.P.
*Dolder, Switzerland	B.P., U.S.P., N.F.
*Dott Bonapace, Italy	
**Eisen Pharmaceuticals, India	B.P., U.S.P., Ind.P.
*Flavine International, USA	
*GYMA Laboratories, USA	
*Marsing, Denmark	B.P., U.S.P.
*Maypro Industries, USA	
*MWM Chemicals, USA	
*Napp Chemicals, USA	
*Oxyde Joba, Netherlands Plantex, USA	B.P., U.S.P.
*Sumitomo Chemicals, Japan	
*Tokyo Hydrazine Industry, Japan	
*Transmedica, F.R. Germany	
*R.W. Unwin, United Kingdom	
*Welding GmbH and Co., F.R. Germany	

Miscellaneous details:

Synonyms: Hydralazine hydrochloride, Apressinum, Hydralazini hydrochloridum, Hydrazinophthalazine hydrochloride

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 148-150, and other relevant information as in official compendia.

Storage: Store in air-tight containers.

Therapeutic category: Antianaemia

Name of product: Hydroxocobalamin

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
ACIC, Canada	
**Alembic, India	B.P., U.S.P.
Alfa Intes, Italy	
American Roland Corp., USA	
*Angelini, Italy	B.P., U.S.P.
*Archemia, Italy	B.P., U.S.P.
**Bago Laboratorios, Argentina	
Chemical Dynamics, USA	
**Chemielux s.à.r.l., Luxemburg	
**CIECH, Poland	B.P., U.S.P.
*Dolder, Switzerland	B.P., U.S.P.
*Dott Bonapace, Italy	B.P., U.S.P.
**Farmitalia Carlo Erba, Italy	
**Glaxochem, United Kingdom	B.P.
*Greef, R.W. USA	
Hormonas y Vitaminas, Mexico	
**Hoffmann-La Roche, F.R. Germany	B.P., U.S.P.
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
Kemika Industrial, Mexico	
**Laboratoires de la Grange, France	
**Eli Lilly, USA	U.S.P.
*Marsing, Denmark	B.P., U.S.P.
**Medimpex, Hungary	
*Merck E., F.R. Germany	B.P., E.P., U.S.P.
**Merck, USA	U.S.P.
*Mitsubishi, Japan	
Nagase Co., Japan	
*Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Pfizer Inc., USA	
Philipps Duphar, Netherlands	
**Pierrel SpA, Italy	
**Productos Quimicos Finos Opoterapicos, Mexico	U.S.P.
**Quimio Productos Quimicos, Brazil	

Hydroxocobalamin

(continued)

Manufacturers/Suppliers:

Quality specification

**Rhone Poulenc, France

B.P., U.S.P., F.P.

Roussel Corp., USA

**Roussel Uclaf, France

B.P., U.S.P., F.P., E.P., J.P.

*Sanofi, France

*Sefton, United Kingdom (see Glaxochem)

B.P., U.S.P.

**Silane Labs, Mexico

Sintequim, Brazil

**Themis Chemicals, India

B.P., U.S.P.

**Vitamins Inc., USA

U.S.P.

Miscellaneous details:

Synonyms: Cyanocobal, Cyanocobal amimum, Cobamin, Cycobemin, Vitamin B12, Co~~α~~(~~α~~5, 6 Dimethylbenzimidazol Co~~β~~-cyanocobamide).

Specifications: as per recognized compendia.

Description, uses, undesirable effects, etc: reference Martindale 28th edition, pages 1644-1646 and other relevant information as in official compendia.

Storage: Store in airtight container. Protect from light.

Therapeutic category: Antidiabetic

Name of product: Insulin

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
Aceto Chemical Co., USA	
*Alembic Chemicals, India	U.S.P., Ind.P.
American Roland Corp., USA	
**Biobras, Brazil	U.S.P.
**Boots Company, United Kingdom	B.P.
**Boots Company, India	B.P., Ind.P.
*Chemapol Czechoslovakia	
*China National Chemicals, China	
**Commonwealth Serum Lab, Australia	
**Connaught, Canada	Can.F.D.A.R.
*Dangschat GmbH, F.R. Germany	
**Dista Products, United Kingdom	
*Diosynth, Netherlands	
**Eli Lilly, USA	U.S.P.
**Hoechst, F.R. Germany	U.S.P., D.A.B.
*Karl O. Helm, F.R. Germany	
*Marsing, Denmark	B.P., U.S.P.
Medimpex, Hungary	
**Nordisk Gentofte, Denmark	
**Novo Industri A/S, Denmark	B.P., U.S.P.
*Oxyde Joba, Netherlands	B.P., U.S.P.
*Pfanstiehl Laboratories, USA	
**Pharmachim, Bulgaria	
*Philipps Duphar, Netherlands	
*Sembodja Holland bv, Netherlands	B.P.
Sqibb S.p.A., Italy	U.S.P.
**Weddle Pharm., United Kingdom	
**Wellcome Foundation, United Kingdom	
United States Biochemicals, USA	

Miscellaneous details:

Synonyms: Insulin injection, Insulini injectio, Insulini solutio injectabilis, Insulin hydrochloride, Ordinary insulin, Regular insulin, Soluble insulin, Unmodified insulin.

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 844 to 851, and other relevant information as in official compendia.

Storage: Store at 2-10 degree C. Should not be allowed to freeze.

Therapeutic category: Antituberculosis

Name of product: Isoniazid

Manufacturers/Suppliers:

Quality specification

*Alfa Intes, Italy	
*Alwitt, United Kingdom	B.P., U.S.P., E.P.
*American Roland Corp., USA	U.S.P., N.F.
**Bayer AG, F.R. Germany	B.P., U.S.P., E.P.
**Bofors AB, Nobel Kemi, Sweden	
Bofors Inc., USA	
*Chimimportexport, Romania	B.P., U.S.P., I.P.
**China National Chemicals China	
**CIPLA, India	
*CIECH, Poland	B.P., U.S.P.
*Dangschat, F.R. Germany	B.P., U.S.P., I.P.
*Dolder, Switzerland	B.P., U.S.P., N.F.
*FBA Pharmaceuticals, USA	U.S.P.
**Gerardo Ramon, Argentina	Argen.P.
GYMA Laboratories, USA	
*Karl O. Helm, F.R. Germany	
*Helm New York Chemicals, USA	
**F. Hoffmann-La Roche, Switzerland	
*ICC Handles, F.R. Germany	
*Iwaki and Co., Japan	
*Lab. Farmacologico, Italy	
**Kemwell, India	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
*Marsing, USA	
Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Pfizer International Inc., USA	
Reilly Tar and Chemicals, USA	
**Rhone Poulenc, France	B.P., U.S.P., F.P.
Rivopharm, Switzerland	
*S.S.T. Corporation, USA	
**Suneeta Laboratories, India	
*Takeda Chemical Industries, Japan	
*Transmedica, F.R. Germany	
**Vecchi and Piam, Italy	
*Yu Yu Industrial Co., South Korea	
*Chemiclux c.s.r.l., Luxemburg	

Isoniazid
(continued)

Miscellaneous details:

Synonyms: Isoniaz, Isoniazidium, Isonicotinic acid Hydrazide, Isonicotinylhydrazide, Isonicotinylhydrazine, Tubazid, Isonicotinoylhydrazde, INH, INAH

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1571-1574 and other relevant information in official compendia.

Storage: Store in air-tight containers. Protect from light.

Therapeutic category: Antihelmintic

Name of product: Mebendazole

Manufacturers/Suppliers:

Quality specification

ACIC Limited, Canada	
*Archemia, Italy	B.P. U.S.P., N.F.
Atul Products, India	
Bayer AG, F.R. Germany	
Chemapol, Czechoslovakia	
**Chemische Werke Lahr, F.R. Germany	B.P., U.S.P., D.A.B.
China National Chemicals, China	
**CIPLA, India	U.S.P.
*Dangschat GmbH, F.R. Germany	
*Dolder, Switzerland	
*Dott Bonapace, Italy	
**Fairdeal Corporation (FDC), India	
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
**ICFI, Italy	B.P., U.S.P.
**Janssen Pharmaceutica, Belgium	B.P., U.S.P.
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
Medimpex, Hungary	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Priti Chemicals, India	U.S.P., Ind.P.
Shinpoong Pharmaceuticals, South Korea	
**Silane Labs, Mexico	
*Transmedica, F.R. Germany	
*Welding GmbH and Co., F.R. Germany	
**Chemielux s.à.r.l., Luxemburg	

Miscellaneous details:

Synonyms: Methyl 5 benzoyl benzimidazol-2 yl-carbamate

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, page 98-99, and other relevant information in official compendia.

Storage: Store in air-tight container.

Therapeutic category: Analgesic and Antipyretic

Name of product: Paracetamol

Manufacturers/Suppliers:

Quality specification

**Alta Labs., India	I.P.
*Alwitt, United Kingdom	B.P., E.P., U.S.P.
Angelini SpA, Italy	
**Amphray Laboratories, India	B.P., U.S.P., Ind.P.
**Bayer AG, F.R. Germany	B.P., E.P., U.S.P.
*Boehringer Ingelheim, F.R. Germany	B.P., E.P., D.A.B., U.S.P.
*Chemapol, Czechoslovakia	B.P., U.S.P., I.P.
**Chefaro Int. BV, Netherlands	
*Chimimportexport, Romania	B.P., U.S.P., I.P.
**China National Chemicals, China	
**Chemiellux s.à.r.l., Luxemburg	
**Compañia Universal de Industrias, Mexico	U.S.P., Mex.P.
*Conary, USA	B.P., U.S.P.
Daicel Chemical Industries, Japan	
*Dangschat GmbH, F.R. Germany	B.P., U.S.P., I.P.
*Dista Products, United Kingdom	B.P., U.S.P.
*Dolder, Switzerland	B.P., U.S.P., N.F.
*Dott Bonapace, Italy	
**Duphar Interfarm, India	
**El Nasr, Egypt	B.P., U.S.P.
**FBA Pharmaceuticals, USA	U.S.P.
**Graesser Laboratories, United Kingdom	B.P., U.S.P., E.P.
*R.W. Greef, USA	
**Hoechst AG, F.R. Germany	U.S.P., E.P.
*Hartington Chemicals, United Kingdom (see Graesser Laboratories)	
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
*ICC Handel, F.R. Germany	
*Indian Drugs and Pharmaceuticals, India	B.P., Ind.P.
*Iwaki, Japan	
**K.K. Greef, United Kingdom	B.P., U.S.P.
**Kemwell Ltd., India	B.P., U.S.P.
Kawaza Sangyo, Japan	
*Lab. Farmacologica, Italy	

Paracetamol

(continued)

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
**Mallinckrodt Inc., USA	U.S.P.
*Marsing, Denmark	B.P., U.S.P.
**Monsanto Limited, USA	U.S.P., B.P., E.P.
Negase Co., Japan	
Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Ov Røhto, Finland	B.P., U.S.P.
Penick Corporation, USA	
Quimica Siul, Argentina	
*Quimica Produtos Q.C.I., Brazil	B.P., U.S.P., J.P.
**Rhone Poulenc, France	B.P., U.S.P., F.P.
*Rivopharm, Switzerland	
*Roussel Corporation, USA	B.P., U.S.P., F.P.
**Salicilatos de Mexico, Mexico	B.P., U.S.P., Mex.P.
**Sanofi, France	B.P., U.S.P., F.P.
*Seven Star, Taiwan	
*Siemsglüss, F.R. Germany	
**Signa S.A., Mexico	
**Sociedad Mexicana, Mexico	
**Sree Krishna, India	
Sterling Drugs, USA	B.P., U.S.P.
**Sterling Organics Ltd., United Kingdom	
Transmedica, F.R. Germany	
**Union Fine Chemicals, South Korea	

Miscellaneous details:

Synonyms: Acetaminophen, 4 Acetamido phenol, 4 Hydroxyacetanilide, N Acetyl p aminophenol, N-(4-Hydroxyphenyl acetamide).

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 268-271 and other relevant compendia.

Storage: Store in well closed container. Protect from light.

Therapeutic category: Antihelmintic

Name of product: Piperazine

Manufacturers/Suppliers:

Quality specification

**Aceto Chemicals, USA	
*American Roland Corp., USA	B.P., U.S.P., N.F.
**BASF, F.R. Germany	B.P., U.S.P.
**Bayer AG, F.R. Germany	B.P., U.S.P., E.P.
Boehringer Ingelheim GmbH, F.R. Germany	
*Chimimportexport, Romania	B.P., U.S.P., I.P.
Chemische Fabrik, Switzerland	
**China National Chemicals, China	
**Compañia Universal de Industrias, Mexico	U.S.P., Mex.P.
*Dangschat, F.R. Germany	B.P., U.S.P., I.P.
Delamine BV, Netherlands	
*Dolder, Switzerland	
*Dott Bonapace, Italy	
*Dow Chemicals, USA	
*Flavine International, USA	
Giusto Faravilli, Italy	
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
**IDPL, India	B.P., Ind.P.
Interchem, USA	
**Japan Hydrazine Co., Japan	
*K.K. Greef, United Kingdom	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
Montoil, France	
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Rexolin Chemicals, Sweden	B.P., U.S.P., E.P.
Rivopharm, Switzerland	
*Stip Laboratori Chemico Biologico, Italy	
S.S.T. Corporation, USA	U.S.P.
*Sumitomo Chemicals, Japan	
*Texaco Chemicals, USA	
*Thomson and Joseph, United Kingdom	
*Transmedica, F.R. Germany	
*Union Carbide, USA	
*R.W. Unwin, United Kingdom	
*Ward Blenkinsop, United Kingdom	
**Nippon Nyukazai Co., Japan	
*Welding GmbH and Co., F.R. Germany	
**Chemielux s.à.r.l., Luxemburg	

Piperazine
(continued)

Miscellaneous details:

Synonyms: Piperazine (available as Piperazine Citrate, Piperazine Hydrate, Piperazine Phosphate).

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 102-104, and other relevant information in official compendia.

Storage: Store in air-tight container. Protect from light.

Therapeutic category: Blood Products

Name of product: Plasma Fractions*

Manufacturers/Suppliers:

Quality specification

**Aima Derivati, Italy	
American Roland, USA	
**Chemie Linz, Austria	
**Commonwealth Serum Labs, Australia	
**Connaught, Canada	
**Curewell, India	B.P., Ind.P.
**Duphar Interfarm, India	B.P., Ind.P.
**Human, Hungary	
**Immuno AG, Austria	B.P., U.S.P., I.P.
**Institut Merieux, France	E.P., WHO requirements
**Istituto Sieroterapico, Italy	
**Kabivitrum AB, Sweden	
**Korea Green Cross Corp., Korea	U.S.P.
**Laboratorios Grifols, Spain	
*Marsing, USA	U.S.P.
*Medexport, USSR	
Medicuba, Cuba	
Medimpex, Hungary	
**Pharmachim, Bulgaria	
**Sanquisan Medicinal, Austria	
**Schweiz-Serum, Switzerland	
**SERO (Serotherapeutisches Institut), Austria	
**Troponwerk GmbH, F.R. Germany	
**United States Biochemicals, USA	

Miscellaneous details:

* Different plasma fractions can serve as plasma substitutes and/or as immunologicals.

Synonyms:

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 321-340 and other relevant information in official compendia.

Storage: Store blood in sterile containers sealed to exclude micro-organisms at 1-6 degrees C; plasma and plasma fractions at -20 degrees C.

Therapeutic category: Antimalarial

Name of product: Primaquine

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
*Alba Chemicals, USA	B.P., U.S.P.
*H.G. Blau, F.R. Germany	B.P., U.S.P.
*Chimimportexport, Romania	B.P., U.S.P., I.P.
*Conary Chemicals, USA	
Daicel Chemical Industries, Japan	
*Dolder, Switzerland	B.P., U.S.P., N.F.
*R.W. Greef, USA	U.S.P.
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
**Imperial Chemical Industries, United Kingdom	
*Marsing, Denmark	B.P., U.S.P.
*Oxyde Joba, Netherlands	B.P., U.S.P.
**Sterling Drug Inc., USA	
*Transmedica, F.R. Germany	B.P., U.S.P.
*R.W. Unwin, United Kingdom	

Miscellaneous details:

Synonyms: Primaquine phosphate, Primaquini diphosphas, Primachin phosphate, Primaquinium phosphate

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 401-402, and other relevant information as in official compendia.

Storage: Store in air-tight container. Protect from light.

Therapeutic category: Antianginal - Antihypertensive - Antiarrhythmic

Name of product: Propranolol

Manufacturers/Suppliers:

Quality specification

ACIC, Canada	
*Archemia, Italy	B.P., U.S.P., N.F.
Byron Chemicals, USA	
*Chimimportexport, Romania	B.P., U.S.P.
**CIPLA, India	
*Daicel Chemical Industries, Japan	
*Dangschat, F.R. Germany	B.P., U.S.P., I.P.
*Dolder, Switzerland	
*Dott Bonapace, Italy	
*EMA Ltd., USA	
*Farnos Group, Finland	B.P., U.S.P., E.P.
*R.W. Greef, USA	U.S.P.
**ICFI, SpA, Italy	B.P., U.S.P.
**Imperial Chemical Industries, United Kingdom	
**Istituto Franco Tosi, Italy	
*Karl O. Helm, F.R. Germany	
Knoll AG., F.R. Germany	
*Marsing, Denmark	B.P., U.S.P.
*Oxyde Joba, Netherlands	B.P., U.S.P.
Plantex, USA	
**Sarabhai, India	
**Sintebras, Brazil	U.S.P.
*Thomson and Joseph, United Kingdom	
*Transmedica, F.R. Germany	
*Welding GmbH and Co., F.R. Germany	

Miscellaneous details:

Synonyms : I-Isopropylamino 3(naph-yloxy)propan-2-ol-hydrochloride
Propranolol hydrochloride, Anaprilin, Proprasylte

Specifications: as per recognized official compendia

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1325-1330, and other relevant information as in official compendia.

Storage: Store in well closed container. Protect from light.

Therapeutic category: Antihypertensive

Name of product: Reserpine

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
*American Roland Corp., USA	U.S.P., N.F.
*Archemia, Italy	B.P., U.S.P., N.F.
*H.G. Blau, F.R. Germany	B.P., U.S.P., N.F.
**Boehringer Ingelheim, F.R. Germany	
**Boehringer Mannheim GmbH, F.R. Germany	U.S.P.
*Centerchem Inc., USA	
*Chimimportexport, Romania	B.P., U.S.P., I.P.
**Ciba Geigy, Switzerland	B.P., U.S.P., I.P.
**CIECH, Poland	B.P., U.S.P., I.P.
**Convex Biotechnology A/S, Denmark	B.P., U.S.P., E.P.
*Dangschat, F.R. Germany	
*Dolder, Switzerland	
*Flavine International Inc., USA	
**INDENA, Italy	
*Marsing, Denmark	B.P., U.S.P.
*Maypro Industries, USA	
*Oxyde Joba, Netherlands	B.P., U.S.P.
Salisbury Labs, USA	
*S.S.T. Corporation, USA	U.S.P.
*Thomson and Joseph, United Kingdom	
*Transmedica, F.R. Germany	
**Chemalux s.à.r.l., Luxemburg	

Miscellaneous details:

Synonyms: Reserpinum, Methyl 18-0-(3,4,5 trimethoxy-benzoyl) reserpate

Specifications: as per recognized official compendia

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 163-165, and other relevant information as in official compendia.

Storage: Store in air-tight container. Protect from light.

Therapeutic category: Vitamin

Name of product: Retinol

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
*Alembic Products, United Kingdom	B.P., U.S.P.
*American Roland Corp., USA	U.S.P.
**BASF, F.R. Germany	U.S.P., E.P.
Chemical Dynamics, USA	
*Dangschat GmbH, F.R. Germany	
Danochemo, Denmark	B.P., E.P., U.S.P.
*Fallek Chemicals, USA	
**F. Hoffmann-La Roche, Switzerland	B.P., U.S.P., E.P.
*ICC Industries, USA	
**Lannacher Heilmittel, Austria	
*Merck, F.R. Germany	B.P., U.S.P., E.P.
MWM Chemicals, USA	
**Organon N.V., Netherlands	
*Oxyde Joba, Netherlands	B.P., U.S.P.
Paul Bruns, F.R. Germany	
**Pfizer International, USA	
Pharmchem Laboratories, USA	
**Productos Roche-Quimicos, Brazil	
**Rhone Poulenc, France	B.P., U.S.P., F.P.
*Riken Vitamin, Japan	
Ukemifar, United Kingdom	
**Vitamins Inc., USA	
**Wander GmbH, Austria	
**Chemielux s.à.r.l., Luxemburg	

Miscellaneous details:

Synonyms: Vitaminum A, Retinol, Anti-infective vitamin, Antixero phthalamic vitamin, Axerophthol, Axerophthylum

Specifications: as per recognized official compendia

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1635-1638, and other relevant information as in official compendia

Storage: Store in cool place, in well-filled air-tight container under an atmosphere of inert gas. Protect from light.

Therapeutic category. Antituberculosis
Name of product: Streptomycin Sulphate

Manufacturers/Suppliers:

Quality specification

*Alba Chemical Inc., USA	B.P., U.S.P.
**Alembic, India	B.P., U.S.P., Ind.P.
*American Roland Corp., USA	U.S.P., N.F.
**Antibioticos SA, Spain	B.P.
*Archemia, Italy	B.P., U.S.P., N.F.
Biochemie, Austria	
*Chimimportexport, Romania	B.P., U.S.P., I.P.
**China National Chemicals, China	
**Chemielux s.à.r.l., Luxemburg	
*CIECH, Poland	B.P., U.S.P.
*Dangschat GmbH, F.R. Germany	B.P., U.S.P., I.P.
*Dolder, Switzerland	
*Flavine International, USA	
*Glaxochem, United Kingdom	B.P., U.S.P.
*GYMA Laboratories, USA	
*Helm New York Chemicals, USA	
**Hindustan Antibiotics, India	B.P., U.S.P., Ind.P.
*Hoechst AG, F.R. Germany	U.S.P., E.P.
**IDPL, India	B.P., U.S.P., Ind.P.
ISF SpA, Italy	
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
*Marsing, Denmark	B.P., U.S.P.
Meiji Seika Kaisha, Japan	
*Orion Pharmaceuticals, Finland	
*Oxyde Joba, Ne herlands	B.P., U.S.P., I.P.
**Pharmachim, Bulgaria	
**Pfizer International, USA	B.P., U.S.P.
**Rhone Poulenc, France	B.P., U.S.P., F.P.
*Sembodja Holland bv, Netherlands	B.P.
*Siemsglüss, F.R. Germany	
Synbiotics, India	
*Transmedica, F.R. Germany	

Streptomycin sulphate

(continued)

Miscellaneous details:

Synonyms: Streptomycini sulfas, Sulfato de E streptomycina

Specifications: as per recognized official compendia.

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1213-1215, and other relevant information in official compendia

Storage: Store in air-tight containers at a temperature not exceeding 25 degrees C. If intended for parenteral administration, the bulk substance and the container should be sterile and sealed to exclude micro-organisms.

Therapeutic category: Antibacterial
Name of product: Sulphadimidine

<u>Manufacturers/Suppliers:</u>	<u>Quality specification</u>
Aceto Chemicals, USA	
**ACF Chemiefarma, Netherlands	B.P., U.S.P., E.P.
American Cyanamid, USA	
American Roland Corp., USA	U.S.P., N.F.
Amphray Lab., India	B.P., U.S.P., Ind.P.
*H.G. Blau, F.R. Germany	B.P., U.S.P.
**Borge Int., USA	U.S.P., B.P.
*Chemapol, Czechoslovakia	B.P., U.S.P., I.P.
**Chemielux s.à.r.l., Luxemburg	
China National Chemicals, China	
*CIECH, Poland	B.P., U.S.P., I.P.
*Daicel Chemical Industries, Japan	
*Dolder, Switzerland	B.P., U.S.P., N.F.
**El Nasr, Egypt	B.P., U.S.P.
*Fallek Products International, Netherlands	
**Farmitalia Carlo Erba, Italy	
**Fako, Turkey	B.P., U.S.P.
*Flavine Int., USA	
Giusto Faravilli, Italy	
*R.W. Greef, USA	
**Crindstead, Denmark	B.P., U.S.P., E.P.
Harbottle, United Kingdom	
Imperial Chemical Industries, United Kingdom	
**IDPL, India	B.P., Ind.P.
*K.K. Greef, United Kingdom	
*Karl O. Helm, F.R. Germany	B.P., U.S.P.
**Istituto Chemioterapico Italiana, Italy	U.S.P.
*Marsing, Denmark	B.P., U.S.P.
**May and Baker, United Kingdom	
*Medimpex, Hungary	
Napp Chemicals, USA	
*Oxyde Joba, Netherlands	B.P., U.S.P.
Pharmachem, Bulgaria	
**Pierrel SpA, Italy	
**Pliva, Yugoslavia	
Rivopharm, Switzerland	

Sulphadimidine

(continued)

Manufacturers/Suppliers:

Quality specification

**Salsbury Labs, USA

*Siemsglüss, F.R. Germany

*Syntetic A/S, Denmark

*Transmedica, F.R. Germany

*R.W. Unwin, United Kingdom

Ukemifar, United Kingdom

B.P., E.P., U.S.P.

B.P., E.P., U.S.P.

Miscellaneous details:

Synonyms: Sulphadimidini sodium, Sulphadimid, Sulfadimidine, sulphadimidine, Sulphadimethylpyrimidine, Sulphamethazine, Sulphadimerizine

Specifications: as per recognized official compendia

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1475-1476, and other relevant information as in official compendia

Storage: Store in air-tight containers. Protect from light.

Therapeutic category: Antibacterial

Name of product: Tetracycline

Manufacturers/Suppliers:

Quality specification

*Alba Chemicals, USA	B.P., U.S.P.
*Alfa Intes, Italy	
**American Cyanamid, USA	
*American Roland Corp, USA	U.S.P., N.F.
**Angelini, Italy	
**ANSA A.S., Turkey	B.P., U.S.P., E.P.
**Antibioticos SA, Spain	
*Archemia, Italy	B.P., U.S.P.
Astra Pharmaceuticals, Sweden	
**Banyo Pharmaceuticals, Japan	
Biochemie GmbH, Austria	B.P., U.S.P., I.P.
**Biomedica Foscama, Italy	B.P., U.S.P.
China National Chemicals, China	
**Chimielux s.à.r.l., Luxemburg	
*Chimimportexport, Romania	B.P., U.S.P.
**CIECH, Poland	
**Cipan, Portugal	B.P., U.S.P.
**Compañía Española de la Penicilina y Antibioticos, Spain	B.P., U.S.P.
*Dangschat, F.R. Germany	B.P., U.S.P., I.P.
Dista Products, United Kingdom	
*Dolder, Switzerland	B.P., U.S.P., N.F.
*Dott Bonapace, Italy	
**El Nasr, Egypt	
*Fallek Products, Netherlands	
**Farmitalia Carlo Erba, Italy	B.P., U.S.P., E.P.
**Fermic SA, Mexico	B.P., U.S.P.
*Flavine Int., USA	
**Gruppo Lepetit, Italy	B.P., U.S.P.
GYMA Laboratories, USA	
*Helm New York Corporation, USA	B.P., U.S.P.
**Hindustan Antibiotics, India	B.P., U.S.P., Ind.P.
**Hoechst, F.R. Germany	U.S.P., E.P.
*ICC Handel, F.R. Germany	
**IDPL, India	B.P., U.S.P.
**Istituto Biochimico Italiano Spa, Italy	B.P., U.S.P.
Iwaki and Company, Japan	
*K.K. Greef, United Kingdom	B.P., U.S.P.
Karl O. Helm, F.R. Germany	

Tetracycline

(continued)

Manufacturers/Suppliers:

Quality specification

*Marsing, Denmark	
*Marsing, USA	
*Meijo Seiko, Japan	
**Mitsui Pharmaceuticals, Japan	
*Novo Industries, Denmark	
*Orion Pharmaceuticals, Finland	
*Oxyde Joba, Netherlands	
**Pfizer International, USA	
**Pharmachim, Bulgaria	
**Pierrel SpA, Italy	
**Pliva Pharmaceuticals, Yugoslavia	
**Proter, Italy	
*Rachelle Laboratories, USA	
**Rhone Poulenc, France	F.P., B.P., U.S.P.
**Roper SpA, Italy	
Roussel Uclaf, France	
*Rivopharm, Switzerland	
*Sembodja, Netherlands	
*Siemsglüss, F.R. Germany	
Société Bristol Meyer, France	
**Société Chimique Pointet Girard, France	B.P., U.S.P.
**Squibb Sons, USA	
**Sterling Drug, Inc., USA	
Takeda Chemical Industries, Japan	
*Transmedica, F.R. Germany	
**Upjohn Company, USA	
*R.W. Unwin, United Kingdom	B.P., U.S.P.
*Welding GmbH and Co., F.R. Germany	

Miscellaneous details:

Synonyms: Tetracycline hydrochloride, Tetracyclini Hydrochloridum

Specifications: as per recognized official compendia

Description, uses, undesirable effects, etc: Reference Martindale 28th edition, pages 1217-1223, and other relevant information as in official compendia

Storage: Store in air-tight container. If intended for injection the bulk substance and container should be sterile and sealed to exclude micro-organisms. Protect from light.

SECTION II - RAW MATERIALS/CHEMICAL INTERMEDIATES

Product: Acetylsalicylic acid

Raw Material/
Chemical Intermediate: Acetic Anhydride

Manufacturers/Suppliers:

- **BDH Chemicals Limited, United Kingdom
 - B.P. Chemicals, United Kingdom
 - Celanese Chemicals, USA
- **Chemproha, Netherlands
 - Comtoir Chimique Continental, France
 - Daicel Chemical Industries, Japan
- **Eastman Chemicals Int., USA
 - *Eastman Chemicals International, Switzerland
- **Farmitalia Carlo Erba, Italy
- **Hoechst AG, F.R. Germany
- **Hopkin and Williams, United Kingdom
 - J.T. Bakers Chemical, USA
 - Lonza Limited, Switzerland
 - Lux Chemicals, USA
- *McKesson Chemicals, USA
 - Montedason, Italy
 - Montoil, France
- *Oxyde Joba, Netherlands
 - Pioneer Salt and Chemicals, USA
- **Rhone Poulenc, France
- **Salicilato de Mexico, Mexico
 - Schuchardt, F.R. Germany
 - Union Carbide, USA
 - Universal Preservechem, USA
- **Versaillaise de Produits Chimiques, France
- **Wacker Chemie, F.R. Germany
 - Whitecourt Limited, United Kingdom
 - Wynmouth Lehr and Fatoil, United Kingdom

Product: Sulphadimidine

Raw Material/
Chemical Intermediate: Acetyl Acetone

Manufacturers/Suppliers:

**Aceto Chemical Co., USA
Celanese Chemicals, USA
**Daicel Chemical Industries, Japan
Henley and Company, USA
Hopkin and Williams, United Kingdom
*Oxyde Joba, Netherlands
Schuchardt, F.R. Germany
**Union Carbide, USA
**Wacker Chemie, F.R. Germany
*Westco Chemicals, USA

Raw Material/
Chemical Intermediate: Acetarilid

Manufacturers/Suppliers:

**Aceto Chemicals, USA
Alba Chemicals, USA
Albright and Wilson, United Kingdom
Bayer AG, F.R. Germany
Conary Chemicals, USA
Contract Chemicals, United Kingdom
*Dolder Limited, Switzerland
**Farmitalia Carlo Erba, Italy
*Giusto Faravilli, Italy
**Hindustan Organic Chemicals, India
**Hoechst AG, F.R. Germany
**Hopkin and Williams, United Kingdom (see also BDH)
*May and Baker, United Kingdom
*Merck, F.R. Germany
**Nipa Laboratories, F.R. Germany
*Orlex Chemicals, USA
*Oxyde Joba, Netherlands
Schuchardt, F.R. Germany
*Transmedica, F.R. Germany
**WNC Nitrochemie, F.R. Germany

Product: Propranolol

Raw Material/
Chemical Intermediate: Alpha-Napthol

Manufacturers/Suppliers:

**Bayer AG, F.R. Germany

**BDH Chemicals Limited, United Kingdom

Biddle Sawyer, USA

Chemapol, Czechoslovakia

**Hopkin and Williams, United Kingdom (see also BDK)

**Merck, F.R. Germany

*Oxyde Joba, Netherlands

Schuchardt, F.R. Germany

*Transmedica, F.R. Germany

**Union Carbide, USA

Product: Ampicillin
Raw Material/
Chemical Intermediate: 6 Amino Penicillanic Acid

Manufacturers/Suppliers:

Aldrich Chemicals, USA
**Antibioticos SA, Spain
**Bago Laboratorios, Argentina
**Bayer AG, F.R. Germany
**Biochemie GmbH, Austria
**Borge International, USA
Chemical Dynamics, USA
**Companhia Brasileira de Antibioticos (CIBRAN), Brazil
**Cipan, Portugal
**Deva Holdings, Turkey
*Dolder, Switzerland
**Fako Turkey
**Fermentaciones y Synthesis, Mexico
Fermic SA, Mexico
**Flamma, Italy
Flavine International, USA
Fontoura-Wyeth, Brazil
**Gist Brocade, Netherlands
*R.W. Greef, USA
**Hoechst AG, F.R. Germany
**IDPL, India
**ISF SpA, Italy
*Karl O. Helm, F.R. Germany
Medimpex, Hungary
Meiji Seiko, Japan
**Mustafa Nevzat, Turkey
Orion Pharmaceuticals, Finland
Orsabe SA, Mexico
**Pharmachim, Bulgaria
**Rhone Poulenc, France
Sqibb S.p.A., Italy
Takeda Chemical Industries, Japan
*Transmedica, F.R. Germany

Product: Paracetamol

Raw Material/
Chemical Intermediate: P Aminophenol

Manufacturers/Suppliers:

- **Bayer AG, F.R. Germany
 - Boehringer Ingelheim, F.R. Germany
 - Chemapol, Czechoslovakia
- **Chemical Dynamics, USA
 - Hindustan Organic Chemicals, India
 - Hilton Davis, United Kingdom
- **Hoechst AG, F.R. Germany
- **Hopkin and Williams, United Kingdom
 - Howard Hall International, USA
- **IDPL, India
 - J.H. Lowenstein and Sons, USA
- **Mallinckrodt Inc., USA
 - Maypro Industries, USA
 - Mitsui Toatsu Fine Chemicals, Japan
 - Orlex Chemicals, USA
 - Pacific Gateway, USA
- **Rhone Poulenc, France
- **Salicilatos de Mexico, Mexico
 - Schuchardt, F.R. Germany
 - Sterling Drugs, USA
 - Sterling Organics, United Kingdom
 - Universal Preservechem, USA

Product: Ethambutol
Raw Material/
Chemical Intermediate: D-2-Aminobutanol

Manufacturers/Suppliers:

Aldrich Chemicals, USA
**American Cyanamid, USA
**BASF AG, F.R. Germany
*Borge International, USA
*Dolder, Switzerland
**Far-hemia, Italy
Fluka AG, Switzerland
*Fluka Chemicals, USA
F. Hoffmann-La Roche, Switzerland
Istituto Chemioterapico Italiano, Italy
**Klockner, F.R. Germany
**Lupin Laboratories, India
*Medimpex, Hungary
**Merck, F.R. Germany
Raptakos Brett, India
**Rhone Poulenc, France
Schuchardt, F.R. Germany
*Transmedica, F.R. Germany

Product: Primaquine
Raw Material/
Chemical Intermediate: P-Anisidine

Manufacturers/Suppliers:

Aceto Chemicals, USA
Alba Chemicals, USA
**Bayer AG, F.R. Germany
Biddle Sawyer, USA
Du Pont Nemour International Switzerland
**Hoechst AG, F.R. Germany
Hopkin and Williams, United Kingdom
**Imperial Chemical Industries, United Kingdom
**Merck, F.R. Germany
*Orlex Chemical, USA
**Rhone Poulenc, France
Schuchardt, F.R. Germany

Product: Chloroquine Phosphate

Raw Material/
Chemical Intermediate: M Chloroaniline

Manufacturers/Suppliers:

Aceto Chemicals, USA
Bayer AG, F.R. Germany
**BDH Chemicals, United Kingdom
Bec Chemicals, India
H.G. Blau, F.R. Germany
Du Pont Nemours, USA
FDC (Fairdeal Corp. PVT Ltd.), India
**Hoechst AG, F.R. Germany
**Hickson and Welsh, United Kingdom
**Hopkin and Williams, United Kingdom
Koch Light Labs, United Kingdom
Maypro Industries, USA
Merck, F.R. Germany
Mitsubishi Chemicals, Japan
*Orlex Chemicals, USA
Schuchardt, F.R. Germany
**Swiss Explosive, Switzerland (SSF Dottikon)

Product: Furosemide

Raw Material/
Chemical Intermediate: Chloroanthranilic Acid

Manufacturers/Suppliers:

*Aceto Chemical, USA
BASF Wyandotte Corp., USA
**Fabbrica Italiana Sintetica, Italy
Orlex, USA
Sherwin Williams Chemicals, USA
S.S.T. Corporation, USA
**Swiss Explosive, Switzerland (SSF Dottikon)

Product: Dapsone

Raw Material/
Chemical Intermediate: P Chloronitrobenzene

Manufacturers/Suppliers:

- **Bayer AG, F.R. Germany
- H.G. Blau, F.R. Germany
- Bofors Nobel, Sweden

- Dow Chemicals, United Kingdom
- **Du Pont De Nemour International, Switzerland
- **Hickson and Welsh, United Kingdom
- **Hindustan Organic Chemicals, India
- **Hoechst AG, F.R. Germany
- **Hopkin and Williams, United Kingdom
- **Imperial Chemical Industries, United Kingdom
- Ishihara Sangyo Kaisha, Japan
- Mitchell Cot Chemicals, United Kingdom
- Mitsui Toatsu Chemicals, Japan
- Monsanto, USA
- Schuchardt, F.R. Germany
- Standard Chlorine Chemicals, USA
- **Swiss Explosive, Switzerland (SSF Dottikon)

Product: Furosemide
Raw Material/
Chemical Intermediate: Chlorosulphonic Acid

Manufacturers/Suppliers:

Aldrich Chemicals, USA
**Bayer AG, F.R. Germany
Chemapol, Czechoslovakia
**Du Pont De Nemour, USA
Hoechst AG, F.R. Germany
**Imperial Chemical Industries, United Kingdom
Jim Walter Resources, USA
Mitsubishi Chemicals, Japan
Monsanto Chemicals, USA
Nissan Chemical Industries, Japan
Rhone Poulenc, France
**Salsbury Labs, USA
Schuchardt, F.R. Germany
**UCB, Belgium

Product: Mebendazole
Raw Material/
Chemical Intermediate: 3:4 Diaminobenzo-phenone

Manufacturers/Suppliers:

**Bofors AB, Nobel Kemi, Sweden
Chemical Dynamics, USA
**Chemische Werke Lahr, F.R. Germany
*Delmar Inc., USA
**FDC (Fairdeal Corporation PVT. Ltd.), India
**Janssen Pharmaceutica, Belgium
Raptakos Brett, India

Product: Dapsone
Raw Material/
Chemical Intermediate: 4:4 Dichlorodiphenylsulfone

Manufacturers/Suppliers:

Aldrich Chemicals, USA
**BASF AG, F.R. Germany
**Bofors AB, Nobel Kemi, Sweden
China National Chemicals, China
**K and K Laboratories, USA
Kyowa Chemicals, Japan
**Schuchardt, F.R. Germany
U.C.B., Belgium
*Van Epenhuysen Chem. Fabriken, Netherlands

Product: Furosemide
Raw Material/
Chemical Intermediate: 4:6 Dichlor-3 Sulfamoylbenzoic Acid

Manufacturers/Suppliers:

*H.G. Blau, F.R. Germany
**Bofors AB, Nobel Kemi, Sweden
**Chemical Dynamics, USA
Farmos Group, Finland
*Medimpex, Hungary

Product: Chloroquine Phosphate

Raw Material/
Chemical Intermediate: 4:7 Dichloroquinoline

Manufacturers/Suppliers:

Aldrich Chemicals, USA
Austin Chemicals, USA
Bec Chemicals, India
*Chemical Dynamics, USA
Chemical Procurement Labs, USA
Harbottle (Pharm), United Kingdom
**Hopkin and Williams, United Kingdom
**Imperial Chemical Industries, United Kingdom
Interchem, USA
*Medimpex, Hungary
Orlex Chemical, USA
**Pfister Chemicals, USA
*Ranbaxy Laboratories, India
**Rhone Poulenc, France
**Sanofi, France
**Southland Corporation, USA
*S.S.T. Corporation, USA
**Sterling Organics, United Kingdom
**Suneeta Laboratories, India
*Transmedica, F.R. Germany
U.C.B., Belgium

Product: Sulphadimidine

Raw Material/
Chemical Intermediate: Dicyandiamide

Manufacturers/Suppliers:

**Advent Chemicals, USA
British Oxygen, United Kingdom
**Hoechst AG, F.R. Germany
**ICC Industries, USA
Lars Christensen Chemicals, Denmark
**Orlex Chemicals, USA
**Philipps Brothers Chemicals, USA
Schuchardt, F.R. Germany

Product: Diethylcarbamazine

Raw Material/
Chemical Intermediate: Diethylcarbamylchloride

Manufacturers/Suppliers:

Aldrich Chemicals, USA
**BASF AG, F.R. Germany
*H.G. Blau, F.R. Germany
*Daicel Chemical Industries, Japan
Dolder, Switzerland
**Essex Chemical Corporation, USA
R.W. Greef, USA
*Kennedy and Klim, USA
**Rexolin Chemicals, Sweden
**Transmedica, F.R. Germany

Product: Chloroquine Phosphate

Raw Material/
Chemical Intermediate: Diethyl-Ethoxy Methylene Malonate Ester

Manufacturers/Suppliers:

Aldrich Chemicals, USA
**BASF, F.R. Germany
*Chemical Dynamics, USA
CTC Organics, USA
*D and O Chemicals, USA
Davos Chemical Corporation, USA
Dynamit Nobel AG, F.R. Germany
Interchem Corp., USA
*Kay Fries, USA
K. and K. Labs, USA
**Lorza, Switzerland
*Maypro Industries, USA
Merck, F.R. Germany
Mitsui Pharmaceuticals, USA
**Rhone Poulenc, France
Schuchardt, F.R. Germany

Product: Ampicillin

Raw Material/
Chemical Intermediate: N:N Dimethylaniline

Manufacturers/Suppliers:

**Aceto Chemicals, USA
BASF Wyandotte, USA
**Du Pont De Nemours, USA
**Hoechst AG, F.R. Germany
*Hopkin and Williams, United Kingdom
**Imperial Chemical Industries, United Kingdom
*Mercantile Development Inc., USA
*Orlex Chemical, USA

Schuchardt, F.R. Germany
*Universal Preservechem, USA

Product: Chloroquine Phosphate

Raw Material/
Chemical Intermediate: Diphenyloxide

Manufacturers/Suppliers:

*Alba Chemicals, USA
Biddle Sawyer, USA
**Dow Chemicals, USA
Givaudan, France
**Imperial Chemical Industries, United Kingdom
Kurogane Kasel, Japan
**Mitsui Toatsu Chemicals, Japan
Monsanto Chemicals, USA
Pentagon Chemicals, United Kingdom
Versaillaise de Produit Chimiques, France

Product: Propranolol
Raw Material/
Chemical Intermediate: Epichlorohydrin

Manufacturers/Suppliers:

Asahi Chemicals, Japan
Chempol, Czechoslovakia
**Dow Chemicals, USA
Nippon Zeon Co., Japan
**Osaka Soda, Japan
Schuchardt, F.R. Germany
Shell Chemicals, USA
**McKesson Chemicals, USA

Product: Erythromycin
Raw Material/
Chemical Intermediate: Erythromycin Thiocynate

Manufacturers/Suppliers:

**Abbott Laboratories, USA
**Cibran, Brazil
**Cipan, Portugal
**Compañía Española de la Penicilina y Antibioticos, Spain
**Dista Products, United Kingdom
**Fako, Turkey
**IDPL, India
*Karl O. Helm, F.R. Germany
**Pharmachim, Bulgaria
**Upjohn International, USA

Product Ethinylestradiol
Raw Material/
Chemical Intermediate: Estrone/Estradiol and Salts/Esters

Manufacturers/Suppliers:

Alwitt Limited, United Kingdom
**Chemical, Industrial and Pharmaceutical Laboratories (CIPIA), India
*Delmar, USA
**Diosynth, Netherlands
*Dolder, Switzerland
Henley and Co., USA
**Mitsubishi Chemical Industries, Japan
Napp Chemicals, Inc., USA
Roussel Uclaf, France
Sembodja Holland b.v., Netherlands
Wyeth Labs, USA

Product: Piperazine
Raw Material/
Chemical Intermediate: Ethylene Chloride
Ethylene Diamine Hydrochloride

Manufacturers/Suppliers:

Akzo Chemie, United Kingdom
BASF, F.R. Germany
Bayer, F.R. Germany
**Conoco, USA
Dolder, Switzerland
**Ethyl Group Chemicals, USA
**Herako Chemical Works, Switzerland
Rexolin Chemicals, Sweden
R.S.A. Corporation, USA
Schuchardt, F.R. Germany
**Texaco Chemicals, USA
*Wynmouth Lehr and Fatoil, United Kingdom

Product: Ethambutol
Raw Material/
Chemical Intermediate: Ethylene Dichloride

Manufacturers/Suppliers:

Abbott Laboratories, USA
**Bayer AG, F.R. Germany
**Conoco Chemicals, USA
Conoco Chemical Europe, Belgium
Dow Chemicals, USA
Ethyl Group Chemicals, USA
Great Lake Chemicals, USA
*Hopkin and Williams, United Kingdom
Pan Britanica Industries, United Kingdom
**PPG Industrial Chemicals, USA
**Rhone Poulenc, France
Schuchardt, F.R. Germany
Sherman Chemicals, United Kingdom
Union Carbide SA, Switzerland

Product: Isoniazid
Raw Material/
Chemical Intermediate: Gamma Picoline

Manufacturers/Suppliers:

American Roland Corporation, USA
**Bayer AG, F.R. Germany
Browning Chemical Corporation, USA
Chemapol, Czechoslovakia
**China National Chemicals, China
Croda Chemicals, United Kingdom
*FBA Pharmaceuticals, USA
**Lonza, Switzerland
Merck, F.R. Germany
Miki Sangyo, USA
**Nepera Chemicals, USA
*Oxyde Joba, Netherlands
Reilly Tar and Chemicals, USA
**Schering AG, F.R. Germany
Schuchardt, F.R. Germany
**Union Carbide, USA
Wynmouth Lehr and Fatoil, United Kingdom

Product: Sulphadimidine
Raw Material/
Chemical Intermediate: Guanidine Nitrate

Manufacturers/Suppliers:

Acetochem Co., USA
Advent Chemicals, USA
**Chemical Dynamics, USA
Degussa, USA
Erianger, USA
**Hoechst AG, F.R. Germany
*Hummel Chemicals, USA
Nippon Kayaku, Japan
*Orlex Chemicals, USA
*Oxyde Joba, Netherlands
Ravit SpA, Italy
**Schuchardt, F.R. Germany
Signo Trading, USA
R.W. Unwin, United Kingdom
**Versaillaise de Produits Chimiques, France
*Transmedica, F.R. Germany

Product: Isoniazid
Raw Material/
Chemical Intermediate: Hydrazine Hydrate

Manufacturers/Suppliers:

Alba Chemicals, USA
Alright and Wilson, United Kingdom
**Aceto Chemicals, USA
Atochem, France
Bayer, F.R. Germany
Biddle Sawyer Corporation, USA
*China National Chemicals, China
Conary Chemicals, USA
*D and O Chemicals, USA
*Dolder, Switzerland
Fisons Industrial Chemicals, United Kingdom
Greef, R.W., USA
**Japan Hydrazine Co., Japan
**Otsuka Chemicals, Japan
Produits Chimiques Ugine Kuhlmann, France
RP Chemicals, USA
Schuchardt, F.R. Germany
*Steetley Chemicals, United Kingdom
Sumitomo, Japan
Tokyo Hydrazine Industry Co., Japan
United Mineral Chemicals, USA

Product: Isoniazid
Raw Material/
Chemical Intermediate: Isonicotinic Acid

Manufacturers/Suppliers:

*Alwitt, United Kingdom
**Bayer AG, F.R. Germany
**Boehringer Ingelheim, F.R. Germany
**Bofors Nobel, USA
**Chemical Dynamics, USA
*Dolder, Switzerland
Iwata KK and Co., Japan
*Reilly Tar Chemicals, USA
Schuchardt, F.R. Germany

Product: Propranolol
Raw Material/
Chemical Intermediate: Isopropylamine

Manufacturers/Suppliers:

**Air Products and Chemicals, USA
**BASF AG, F.R. Germany
 BASF Wyandotte, USA
 BP Chemicals, United Kingdom
**Chemtech Inc., USA
**Daicel Chemical Industries, Japan
**Hoechst AG, F.R. Germany
 Honeywill and Stein, United Kingdom
**Imperial Chemical Industries, United Kingdom
 McKesson Chemicals, USA
 Mitsui Toatsu, Japan
 Merck, F.R. Germany
 Schuchardt, F.R. Germany
 Seitetsu Kagaka, Japan
**Union Carbide, United Kingdom
 Univar Chemicals, USA

Product: Mebendazole
Raw Material/
Chemical Intermediate: Methylchloroformate

Manufacturers/Suppliers:

B.A.S.F. Wyandott, USA
Hoechst AG, F.R. Germany
Henley and Co., USA
R.W. Greef, USA
PPG Industries, USA

Product: Diethylcarbamazine
Raw Material/
Chemical Intermediate: 1 Methylpiperazine Hydrochloride

Manufacturers/Suppliers:

Aldrich Chemicals, USA
**Chemical Dynamics, USA
D and O Chemicals, USA
Delmar Inc., USA
*Dolder, Switzerland
**Dow Chemicals, USA
*Greef, R.W., USA
Interchem, USA
**Kennedy and Klim, USA
Merck, F.R. Germany
Miki Sangyo, USA
R.S.A. Corporation, USA
Schuchardt, F.R. Germany
**Texaco Chemicals, USA
Thomason and Joseph, United Kingdom
U.C.B., Belgium
**Versaillaise de Produits Chimiques, France
**Chemielux s.à.r.l., Luxemburg

Product: Primaquine
Raw Material/
Chemical Intermediate: P Methoxy-o-Nitroaniline

Manufacturers/Suppliers:

**Hoechst, F.R. Germany
Schuchardt, F.R. Germany

Product: Piperazine
Raw Material/
Chemical Intermediate: Mono ethanolamine

Manufacturers/Suppliers:

**BASF AG, F.R. Germany
*BDH Chemicals, United Kingdom
BP Chemicals, United Kingdom
Chemische Fabrik Schweizerhall, Switzerland
Fallek Chemicals, USA
Honeywill and Stein, United Kingdom
ICC Industries, Netherlands
**Imperial Chemical Industries, United Kingdom
Lux Chemicals, USA
Merck, F.R. Germany
Montedison, Italy
Pioneer Salt and Chemicals, USA
Rexolin Chemicals, Sweden
Schuchardt, F.R. Germany
Shell, United Kingdom
**Shell Chemicals, USA
Stinnes Chemicals, USA
**Texaco Chemicals, USA
Union Carbide, United Kingdom
Universal Preservechem, USA
Yokkaichi Chemical Co., Japan

Product: Dapsone
Raw Material/
Chemical Intermediate: 1:4 Nitrobenzene

Manufacturers/Suppliers:

American Cyanamid, USA
*BASF AG, F.R. Germany
**Bayer AG, F.R. Germany
Bofors Nobel, USA
**Du Pont De Nemours, USA
Giusto Faravilli, Italy
**Hickson and Welsh, United Kingdom
Hoechst AG, F.R. Germany
Hopkin and Williams, United Kingdom
**Imperial Chemical Industries, United Kingdom
**May and Baker, United Kingdom
**Rhone Poulenc, France
Schuchardt, F.R. Germany
Swiss Explosive, Switzerland
**Versaillaise de Produits Chimiques, France

Product: Chloroquine Phosphate
Raw Material/
Chemical Intermediate: Novaldiamine (1 Diethylamino 4-amino pentane)

Manufacturers/Suppliers:

Aldrich Chemicals, USA
**BASF AG, F.R. Germany
Chemical Procurement Lab, USA
Imperial Chemical Industries, United Kingdom
K and K Labs, USA
**Rhone Poulenc, France
Sterling Drug Inc., USA
*Transmedica, F.R. Germany
Union Carbide, USA

Product: Hydraiazine
Raw Material/
Chemical Intermediate: Phthalazone

Manufacturers/Suppliers:

Chemical Dynamic Corp., USA
Chemical Procurement Lab., USA
**Dynamite Nobel AG, F.R. Germany
Fluka Chemicals, USA
Nippon Synthetic Chem., Japan
**Rhone Poulenc, France

Product: Ampicillin
Raw Material/
Chemical Intermediate: D Phenylglycine

Manufacturers/Suppliers:

**Aceto Chemicals, USA
*American Roland Corp., USA
Bentex Chemicals, USA
Chemical Dynamics, USA
**Deva Holdings, Turkey
*Hoechst AG, F.R. Germany
*Greef, R.W. USA
Kay Fries Chemicals, USA
Medimpex, Hungary
Nippon Kayaku, Japan
Schuchardt, F.R. Germany
Tanabe Chemicals, Japan
Upjohn Co., USA
Wall Chemical Corporation, USA
**Ward Blenkinsop, United Kingdom
Wilshire Chemicals, Co., USA

Product: Acetylsalicylic Acid

Raw Material/ Salicylic Acid
Chemical Intermediate:

Manufacturers/Suppliers:

Aceto Chemicals, USA
**Alta Labs., India
American Roland Corporation, USA
**Andhra Sugar Ltd., India
J.T. Bakers Chemicals Co., USA
Bayer AG, F.R. Germany
Bentex Chemicals, USA
H.G. Blau, F.R. Germany
Browning Chemicals, USA
Chemproha Chemische, Netherlands
*Dolder, Switzerland
**Dow Chemicals, USA
*Flavine International, USA
*Giusto Faravilli, Italy
Graesser Laboratories, United Kingdom
*R.W. Greef, USA
**Gruppo Lepetit, Italy
*Lars Christensen Chemicals, Denmark
*Merck, F.R. Germany
Mitsui Pharmaceuticals, Japan
**Monsanto, Belgium
**Monsanto Limited, United Kingdom
MWM Chemicals, USA
*Karl O. Helm, F.R. Germany
Orlex Chemicals, USA
*Oxyde Joba, Netherlands
**Rhone Poulenc, France
**Salicilatos de Mexico, Mexico
Schuchardt, F.R. Germany
Sterling Drugs, USA
*Transmedica, F.R. Germany
R.W. Unwin, United Kingdom
**Versaillaise de Produits Chimiques, France
Whitecourt Limited, United Kingdom
**Yoshitomi Pharm., Japan

Product: Ascorbic Acid

Raw Material/ Sorbitol
Chemical Intermediate:

Manufacturers/Suppliers:

American Roland Corporation, USA
Advent Chemicals, USA
*Alwitt, United Kingdom
Bayer AG, F.R. Germany
*Biddle Sawyer, USA
H.G. Blau, F.R. Germany
Chemapol, Czechoslovakia
Conary Chemicals, USA
Davos Chemical, USA
**Hefti AG, Switzerland
*Helm New York Chemicals, USA
F. Hoffmann-La Roche, Switzerland
ICI, United Kingdom
Istituto Chemiterapico Italiano, Italy
Laporte Industries, United Kingdom
Lars Christensen Chemicals, Denmark
Lonza, Switzerland
*Maypro Industries, USA
Merck, F.R. Germany
Mitsui Chemicals, Japan
*Oxyde Joba, Netherlands
Pacific Gateway, USA
**Pfizer, USA
**Pharmachim, Bulgaria
Roland SA, Belgium
**Roquette, USA
Stetley Chemicals, United Kingdom
S.S.T. Corporation, USA
Stinnes Chemicals, USA
Syntetic, Denmark
Universal Preservechem, USA
*Westco Chemicals, USA

Product: Dapsone

Raw Material/ Sulfanilic Acid
Chemical Intermediate:

Manufacturers/Suppliers:

Advent Chemicals, USA
American Cyanamid, USA
*Biddle Sawyer, USA
Chemical Dynamics, USA
Croda Chemicals, United Kingdom
Davos Chemicals, USA
London Chemicals, United Kingdom
Mitsui Pharmaceuticals, USA
Orlex Chemicals, USA
Schuchardt, F.R. Germany
*Welding GmbH and Co., F.R. Germany

Raw Material/ Sulphurylchloride
Chemical Intermediate:

Manufacturers/Suppliers:

Atochem, France
**BASF AG, F.R. Germany
**Bayer AG, F.R. Germany
Chemische Fabrik Schweizerhall, Switzerland
Farmitalia Carlo Erba, Italy
**Hooker Chemicals, USA
**Säurefabrik Schweizerhall, Switzerland
Schuchardt, F.R. Germany
*Welding GmbH and Co., F.R. Germany

Product: Sulphadimidine

Raw Material/
Chemical Intermediate: Sulphaguanidine

Manufacturers/Suppliers:

ACF Chemiefarma, Netherlands
**Aceto Chemicals, USA
Agvar Chemicals, USA
Archemia, Italy
*H.G. Blau, F.R. Germany
*Chemapol, Czechoslovakia
*Dolder, Switzerland
*Flavine International, USA
*Giusto Faravilli, Italy
*GYMA Laboratories, USA
*Howard Hall International, USA
**Istituto Chemioterapico Italiano, Italy
*Imperial Chemical Industries, United Kingdom
Lars Christensen Chemicals, Denmark
*Karl O. Helm, F.R. Germany
Maypro Industries, USA
MWM Chemicals, USA
*Oxyde Joba, Netherlands
Pliva, Yugoslavia
S.E.I.A., France
Syntetic, Denmark
Thomason and Joseph, United Kingdom
*Transmedica, F.R. Germany
R.W. Unwin, United Kingdom
WNC Nitrochemie, F.R. Germany
*Welding GmbH and Co., F.R. Germany

Product: Tetracycline

Raw Material/
Chemical Intermediate: Tetracycline Arquad Salt
Tetracycline Urea Complex
Demethylchlortetra Cycline Urea Complex

Manufacturers/Suppliers:

**Cipan, Portugal
**Compañia Española de la Penicilina y Antibioticos, Spain
Hoechst AG, F.R. Germany
**Pfizer, USA
Sterling Organics, USA

Abbott Laboratories
North Chicago, IL 60064
USA
Tel.: 910-235-1584

Aceto Chemicals Co. Inc.
126-02 Northern Boulevard
Flushing, NY 11368
USA
Telex: 62662 intl

ACF Chemiefarma n.v.
P.O.Box 5
Straatweg 2
3600 AA Maarssen
THE NETHERLANDS
Tel.: 030-452911
Telex: 47751 acf nl

Aché Laboratorios Farmaceuticos S.A.
Rodovia Presidente Dutra, km 227
07000 Guarulhos
Sao Paulo
BRAZIL

ACIC Ltd.
60 St. Clair Avenue, Suite 304
Toronto, Ontario M4T 1N5
CANADA
Telex: 06-22138

Advent Chemical
192 Hampton Road
Southampton, NY 11968
USA

Agvar Chemicals Inc.
145 East 27 Street
New York, NY 10016
USA
Telex: 23770-4 agvar

Aima Derivati Spa.
Via Della Chimica 02010
55020, Castelvecchi Pascoli
S. Rufina
ITALY
Telex: 690191 aima

Air Products and Chemicals
P.O.Box 538
Allentown, PA 18105
USA
Telex: 847416

Akzo Chemie
1-5 Queens Road
Hersham
Surrey
UNITED KINGDOM

Alba Chemical Company Inc.
285 County Road
Tenafly, NJ 07670
USA
Tel.: 201-569-3636
Telex: 642139

Aldrich Chemicals
940 W. St. Paul Avenue
Milwaukee, WI 53233
USA
Telex: 26843

Alembic Chemical Works Co. Ltd.
Alembic Road
Baroda - 390 003
INDIA
Tel.: 83551, 82651
Telex: 0175/201

Alembic Products
Oakland House
Oakland Drive
Manchester M33 IWS
UNITED KINGDOM
Telex: 667740

Alfa Intes
Casoria, Via F 111
Bandiera 26
ITALY
Tel.: 759-6622
Telex: 720047 intes i

Alimentos Balanceados de
Mexico S.A. de C.V.
Av. Industria Militar 261
Mexico 10, DF
MEXICO

Alta Laboratories Ltd.
532 Senapati Bapat Marg.
P.O.Box 7019, Dadar
Bombay - 400 028
INDIA

Alwitt Ltd.
Zelide House
2-4 Mount Ephraim
Turnbridge Wells, Kent TN4 8AS
UNITED KINGDOM
Tel.: 0892-36111
Telex: 95146

American Cyanamid Co.
Berdan Avenue
Wayne, NJ 07470
USA
Tel.: 831-200
Telex: 130400

American Roland Corporation
157 Chambers Street
New York, NY 10007
USA
Tel.: 349-0170
Telex: RCA 23-2771 amro ui
ITT 422439 amro ui

Amphray Laboratories
Sambava Chamber, 4th floor
Sir P.M. Road
Bombay - 400 001
INDIA

Andhra Sugars Ltd.
Tanuku, Andhra Pradesh
INDIA
Tel.: 333
Telex: RY 0492-242 and
HD 0155-570

Angelini SpA
Viale Amelia 70
00181 Rome
ITALY
Tel.: 7933
Telex: 611427

ANSA Antibiotik Ve Ilac Hammaddeleri A.S.
Ankara Asfalti, Köseköy Mevkii
P.O.Box 54 Izmit
TURKEY
Tel.: 119-58-16-2-
Telex: 33 195 anil tr

Antibioticos S.A.
38 Bravo Murillo
Madrid 3
SPAIN
Tel.: 446-7000
Telex: 22933 antib e

Archemia S.R.L.
Via Pagliano 21
20149 Milan
ITALY
Tel.: 4988211-3
Telex: 331238 archem i

Asahi Chemical Industry Co. Ltd.
1-1-2 Yurakucho Chidaku
Tokyo 100
JAPAN
Tel.: 03-507-7694
Telex: 222-6166 asahis j

Astra Pharmaceutical Production AB
S-15185 Södertälje
SWEDEN
Tel.: 0755-32980
Telex: 13014 astrapu s

Atochem
La Defense 5 Cedex 24
F-92091 Paris
FRANCE
Telex: 620953 ato f

Atul Products
P.O. Atul 396020
Dist. Valsed
Gujarat State
INDIA
Telex: 0173232 atul in

Austin Chemicals
8410 West Bryn Ave.
Chicago, IL 60631
USA
Telex: 280342

Bago Laboratories
Bernardo de Irigoyen 248
1407 Buenos Aires
ARGENTINA

Banyo Pharmaceuticals
7 Nikonbashi, Honcho-2 Chome
Chno-ku
Tokyo 100
JAPAN
Telex: 24705

BASF Aktiengesellschaft
Carl-Bosch-Strasse
D-6700 Ludwigshafen am Rhein
FEDERAL REPUBLIC OF GERMANY
Tel.: 0621-60-1, 0621-60-26435
Telex: 464 677

BASF Wyandotte Corporation
P.O.Box 181
Parsippany, NJ 07054
USA
Telex: 136647

Bayer AG
Leverkusen
FEDERAL REPUBLIC OF GERMANY
Tel.: 301
Telex: 85103-0 by d

B.D.H. Chemicals Limited
Broom Road
Poole BH12 4NN, Dorset
UNITED KINGDOM
Tel.: 745520
Telex: 41186 tetra g

BEC Chemicals
Victoria Building
Abdullah Brelvi Road
Fort, Bombay
INDIA
Tel.: 011-2560

Becpharm Ltd.
Patman House
George Lane
South Woodford
London E18
UNITED KINGDOM
Telex: 897734

Beecham Research International
Beecham House
Great West Road
Brentford, Middlesex
UNITED KINGDOM
Tel.: 01-560-5151
Telex: 935986

Bengal Chemicals and
Pharmaceuticals Ltd.
Ganesh Chunder Avenue
Calcutta - 700 013
INDIA
Tel.: 23-2165
Telex: 021-7773

Bentex Chemicals
1 Main Street
P.O.Box 639
Chatham, NJ 07928
USA
Tel.: 635-4841
Telex: 642-507

Biddle Sawyer Corporation
2 Penn Plaza
New York, NY 10121
USA
Tel.: 212-736-1580

Biobrás Bioquímica do Brasil S/A
Avenida "C" 1413
Distrito Industrial - Montes Claros
39.400 BRAZIL
Tel.: 2215888
Telex: 031-1882 bqbr

Biochemie GmbH
A-6250 Kundl/Tirol
AUSTRIA
Tel.: 05338/511
Telex: 51231

Biomedica Foscama
Ind. Chimico Farm. SpA
Via Tiburtina km 14,500
00131 Rome
ITALY
Telex: 616181 biomed

H.G. and C. Blau
Glockengiesserwall 26
D-2000 Hamburg 1
FEDERAL REPUBLIC OF GERMANY
Tel.: 337531
Telex: 61605

Boehringer Ingelheim GmbH
Postfach
D-6507 Ingelheim/Rhein
FEDERAL REPUBLIC OF GERMANY
Telex: 4187910 bid

Boehringer Mannheim GmbH
Postfach 31020
D-6800 Mannheim 31
FEDERAL REPUBLIC OF GERMANY

Bofors A.B., Nobel Kemí
P.O.Box 800
S-69180 Bofors
SWEDEN
Tel.: 0586-81000
Telex: 73346 bonobel s

Bofors Nobel Inc.
5025 Evanston Avenue
Muskegon, MI 49443
USA
Tel.: 616-788-2341
Telex: 228455

Boots Company PLC
1 Thane Road West
Nottingham NG2 3AA
UNITED KINGDOM
Tel.: 0602-506111
Telex: 377811

Boots Company (India) Ltd.
17, R. Kamani Marg
Bombay - 400 038
INDIA
Tel.: 266981
Telex: 113842 drug in

Borge Int.
9929 Hibert Street
San Diego, CA 92131
USA
Telex: 181712

Bracco Industria C.
Via Egidio Folli 50
20134 Milan
ITALY
Telex: 311185 bracco

Browning Chemicals Corporation
330 Madison Avenue
New York, NY 10017
USA
Telex: RCA 235039

B.P. Chemicals
Belgrave Square 76
Buckingham Palace Road
London SW1
UNITED KINGDOM

Byron Chemicals Co.
40-11 Twentythird Street
Long Island, NY 11101
USA
Tel.: 786-8441
Telex: RCA 224255
ITT 425795

Celanese Chemicals
1250 Mockingbird Lane
Dallas, Texas
USA
Tel.: 901-861-4049

Centerchem Inc.
475 Park Avenue
New York, NY 10016
USA
Telex: 223322 ecc ur

Centrala Importowa Eksportowa
Chemikalii (CIECH)
P.O.Box 271
ul. Jarna 12
00-950 Warszawa
POLAND
Tel.: 26-90-01
Telex: 814561

Chefaro International B.V.
P.O.Box 20
Kloosterstraat AG 46
NL-5349 AB Oss
THE NETHERLANDS
Tel.: 412-61444
Telex: 37500

Chem'e Linz
St. Peterstrasse 25
A-4020 Linz
AUSTRIA

Chemical Dynamics
P.O.Box 395
South Plainfield, NJ 07080
USA
Tel.: 201-753-5000
Telex: 833-447

Chemical, Industrial and
Pharmaceutical Laboratories Ltd.
(CIPLA)
289 Bellasis Road, Bombay Central
Bombay - 400 008
INDIA
Tel.: 392881
Telex: 114741 cip in

Chemical Procurement Labs.
28, 130th Street
P.O.Box 75
College Point, NY 11356
USA

Chemproha Chemische Producten B.V.
P.O.Box 35
NL-3330 Zwijndrecht
THE NETHERLANDS
Tel.: 078-128366
Telex: 28108

Chemische Fabrik Schweizerhalle
Elsasserstrasse 229
CH-4013 Basel
SWITZERLAND

Chemapol Foreign Trade Corp. Ltd.
Kodanska 46
100 10 Praha 10
Vrsovice
CZECHOSLOVAKIA
Tel.: 715/2608
Telex: 122 136 chpl c

Chemische Werke Lahr GmbH
Raiffeisenstrasse 4
D-7630 Lahr
FEDERAL REPUBLIC OF GERMANY
Tel.: 7821/24081, 43806
Telex: 754956 cwlr

Chemtech Industries
1655 Des Peres Road
St. Louis, Missouri 63131
USA

Chemielux a.d.r.l.
Boite Postale, 6
Walferdange
LUXEMBURG

Ciba-Geigy Limited
CH-4002 Basel
SWITZERLAND
Tel.: 061-361111
Telex: 62991

CIPAN (Companhia Industrial Productora
de Antibioticos)
Aven. Gomes Pereira 74
1500 Lisbon
PORTUGAL
Tel.: 704151-55
Telex: 14393 cipan p

Chimimportexport
10 Republicii Boulevard
Bucharest III
THE SOCIALIST REPUBLIC OF ROMANIA
Tel.: 160636
Telex: 011184, 011169

China National Chemicals Corporation
The Ministry of Chemical Industry
Erh-Li-Kon Hsi
Chiao
Beijing
THE PEOPLE'S REPUBLIC OF CHINA

Companhia Brasileira de Antibioticos
(CIBRAN)
Rua Conde de Bonfin
604 Sobrejoja Tijuca
Cep. 20520 Rio de Janeiro
BRAZIL

Compañia Española de la Penicilina
y Antibioticos S.A.
C/ Mendez Alvaro, 57
Madrid-7
SPAIN
Tel.: 468.1636
Telex: 45448 cepp e

Compañia Universal de Industrias S.A.
Avn. Cuauhtemoc 133-60 Piso
Mexico 7, D.F. C.P.
06700 MEXICO
Tel.: 584-3455
Telex: 1772308 aiem

Comptoire Chimique Continental
B.P. 26
11 Premiere Av.
13741 Vitrolles
Cedex
FRANCE

Commonwealth Serum Labs.
45 Popular Road
Parkville, Victoria
AUSTRALIA 3051
Telex: 32789

Conary Chemicals
P.O.Box 848
97 Ongley Street, Rockville Centre
New York, NY 11571
USA
Telex: 221653 ccii ur

Connaught Laboratories
1755 Steeles Avenue West
Willowdale M2N 5T8, Ontario
CANADA
Tel.: 416-667-2967
Telex: 06-22184 contox

Conoco Chemicals Co.
P.O.Box 19029
Houston, Texas 77224
USA
Tel.: 713-531-3347
Telex: 494557

Conoco Chemicals Europe
7 Joseph Steven
B-1000 Brussels
BELGIUM

Contract Chemicals
Howley Industrial Est.
Howley Lane, Warrington
Ches. WA1 2DN
UNITED KINGDOM

Croda Chemicals
Cowick Hall
Snaith, Goole
N. Humberside DN14 9AA
UNITED KINGDOM

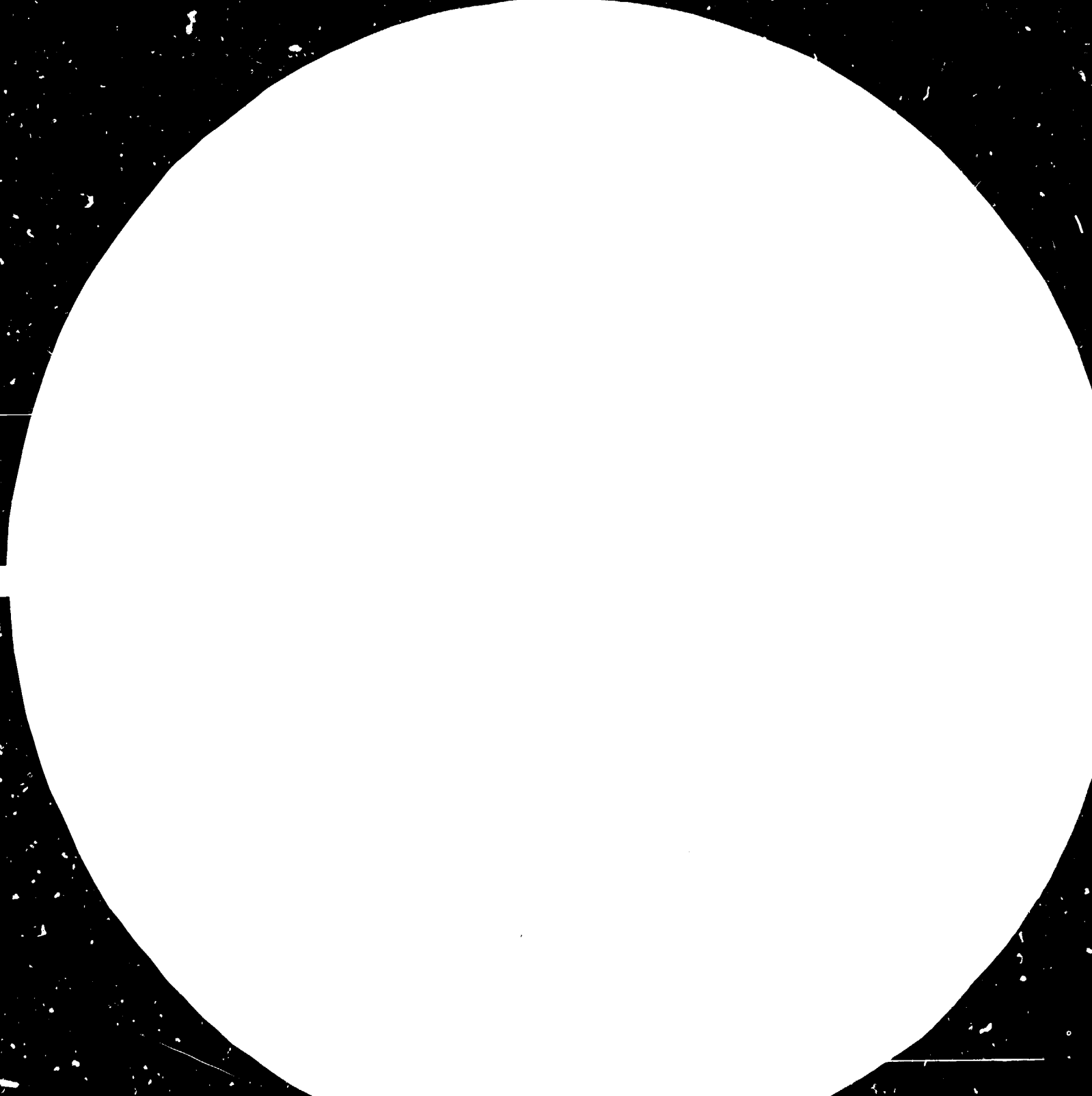
CTC Organics
P.O.Box 6933
Atlanta, GA 30315
USA
Telex: 542250

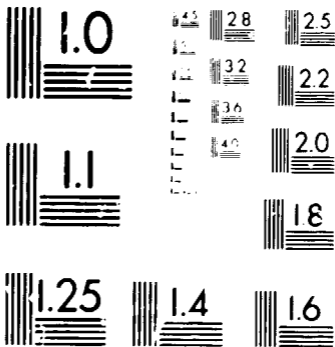
Curewell (India) Ltd.
808-810 Chiranjiv Tower
Nehru Place
New Delhi
INDIA
Tel.: 647986
Telex: 031-5303 cure in

84.12.18

AD.86.07

IIIEFIC





MICROCOPY RESOLUTION TEST CHART
 NATIONAL BUREAU OF STANDARDS
 STANDARD REFERENCE MATERIAL 1010a
 (ANSI and ISO TEST CHART No. 2)

Daicel Chemical Industries Ltd.
Toranomon Mitsui Building
8-1 Kasumigaseki
3-Chome Chiyoda ku
Tokyo 100
JAPAN
Tel.: 03-507-3146
Telex: 222-4632

Dangschat GmbH
Frankenstrasse 35
D-2000 Hamburg 1
FEDERAL REPUBLIC OF GERMANY
Tel.: 040-331377
Telex: 2-12 501 dang d

Danochemo A.S.
Malniparken 5
DK-2750 Ballerup
DENMARK
Tel.: 452-973700
Telex: 35382

Davos Chemicals
2500 Leemoine Avenue
Fort Lee, NJ 07024
USA
Telex: WU 135422

D and O Chemicals
P.O.Box 29
Fort Lee, NJ 07024
USA
Telex: 642804 doc fort

Degussa AG
Frauenstrasse 9
D-6000 Frankfurt am Main
FEDERAL REPUBLIC OF GERMANY

Degussa
Rt. 46, Hollister Road
Teterboro, NJ 07068
USA

Delmar Inc.
2653 Greenleaf Avenue
Elk Grove Village, IL
USA
Telex: 287443

Deva Holdings
Gültepe Kavşağı No. 199
4 Levent, Istanbul
TURKEY
Tel.: 1646460
Telex: 26162

Diosynth International BV
P.O.Box 20
Kloosterstraat 6
NL-5340 BH Oss
THE NETHERLANDS
Tel.: 4120-61335
Telex: 37450

Dista Products Limited
Fleming Road, Speke
Liverpool L24 9LN
UNITED KINGDOM
Tel.: 486-3939
Telex: 627178

Dolder Limited
Immengasse 9
CH-4004 Basel
SWITZERLAND
Tel.: 576600
Telex: 62306, 63048

Dott Bonapace and Co. SpA
P.O.B. 1840
Via Canova 12
20145 Milan
ITALY
Telex: 330812 Labefa

Dow Chemicals
Bennett Building 2030
Dow Centre Milland, MI 48640
USA
Tel.: 517-636-2910
Telex: 227455

Dow Chemicals Europe
CH-8810 Horgen
SWITZERLAND
Tel.: 01-728111
Telex: 835420

Duphar Interfarm Limited
Shivaager Estate
Dr. A.B. Road
Bombay
INDIA

Du Pont De Nemours
1007 Market Street
Wilmington, DE 19898
USA
Tel.: 302-774-7547

Du Pont De Nemours International
50-52 route des Acacias
CH-1211 Geneva 24
SWITZERLAND
Telex: 22512

Dynamit Nobel AG., Vertrieb Chem.
P.O.Box 1209
5210 Trosidorf
FEDERAL REPUBLIC OF GERMANY
Telex: 610500

Eastman Chemical's International
Baarerstrasse 8
CH-6301 Zug
SWITZERLAND
Tel.: 042-232525
Telex: 868824

Eastman Chemicals Int.
P.O.Box 431
Kingport, TN 37662
USA
Telex: 553450

Eisen Pharmaceutical Co. (PVT) Ltd.
34/7 Erandwana
Gulawani Maharaj Marg
Pune - 411 004
INDIA
Tel.: 57063
Telex: c/o 0145-533 mcci

El Nasr Pharmaceutical Chemical Co.
Abu Zaabal
Cairo
EGYPT
Tel.: 867450
Telex: 929-- adwic un

Eli Lilly and Company
307E McCarty Street
Indianapolis, IN 46285
USA
Tel.: 317-261-0111
Telex: 276051

E.M.A. Ltd.
European Manufacturers Associates
745 Fifth Avenue, Suite 403
New York, NY 10151
USA
Telex: 126421

Essex Chemicals Corporation
1401 Broad Street
Clifton, NJ 07015
USA
Tel.: 710-989-7045

Ethylgroup Chemicals
451 Florida Street
Baton Rouge, LA 70801
USA
Telex: 510993597

Erianger and Co, Inc.
1 Bridge Plaza North
Fort Lee, NJ 04024
USA

Fabbrica Italiana Sintetici SpA
Via Milano 26
36041 Alte di Montecchio
Vincenza
ITALY

Fako Ilaçlari anonim şirketi
4 Levent Büyükdere Cad. 205
Istanbul
TURKEY
Tel.: 641355
Telex: 26282 fako tr

Fallek Chemicals Co.
460 Park Avenue
New York, NY 10002
USA
Tel.: 752-0250
Telex: 148395

Fallek Products International
Koningslaan 19
P.O.Box 7494
Amsterdam
THE NETHERLANDS
Tel.: 763333
Telex: 16293

Farchemia Spa
Via Bergamo 121
Treviglio, B.G.
ITALY
Tel.: 0363/40555
Telex: 302230 farche i

Farmitalia Carlo Erba
Gruppa Montedison
Via Carlo Imbonati 24
20159 Milan
ITALY
Tel.: 02-69951
Telex: 310679 monted

Farmos Group Limited
P.O.Box 425
20201 Turku 10
FINLAND
Tel.: 359-21-382111
Telex: 62114 fayht sf

FBA Pharmaceuticals
Mobay Corporation
425 Park Avenue
New York, NY 10022
USA
Tel.: 212-751-5544
Telex: 640562 matchem

FDC (Fairdeal Corporation PVT Ltd.)
66 Lekshmi Building
Sir P.M. Road, Fort
Bombay - 400 001
INDIA
Tel.: 259341
Telex: 011-5715 otek in

Fermentaciones y Synthesis S.A.
Moctezuma Sur 201
Col. de Valle, Apdo. postal 301
Garza García
Monterrey, N.L.
Mexico, D.F.
MEXICO

Fermic S.A. de C.V.
Calle Reforma 300
San Nicolas Tolentino
P.O.Box 55012
09810 Mexico, D.F.
MEXICO
Telex: 017-60152 ferm me

Fermion OY
Kairumankkaankaja
P.O.Box 28
02101 Espro 10
FINLAND
Tel.: 423122
Telex: 121818

Fisons Industrial Chemicals
Hauxton, Camb. CB2 5HU
UNITED KINGDOM

Flamma SRL
Via Boccaleon 13
24100 Bergamo
ITALY
Telex: 301036 flamma 1

Flavine International Inc.
231 Hervert Ave.
Closter, NJ 07647
USA
Tel.: 768-4190
Telex: 135153 flavine

Fluka AG, Chemische Fabrik
CH-9470 Buchs
SWITZERLAND
Telex: 74282

Fluka Chemicals Corp.
255 Oser Ave.
Nauppogyne, NY 11787
USA

Fontoura-Wyeth
Industrias Farmaceuticas
Rua Caetano Pinto 129
03041 San Pablo, SP
BRAZIL
Tel.: 2792211
Telex: 23530

Gador y Cia. S.A.C.I. Laboratorios
Dr. Grámer 2462
1428 Buenos Aires
ARGENTINA

Gerardo Ramón y Cia. S.A.I.C. - Int.
Amaro Avalos 4208
1605 Munro
PC1A-BS-AS (Buenos Aires)
ARGENTINA

Gist Brocade
P.B. 1
Wateringsweg 1
Delft
THE NETHERLANDS
Telex: 38031

Giusto Faravilli
Via Medardo Rosso 8
20159 Milan
ITALY

Givaudan Sarl
44 Bd. du Parc
92521 Neuilly sur Seine
FRANCE

Glaxochem Limited
Greenford, Middlesex UB6 OHE
UNITED KINGDOM
Tel.: 01-422-3434
Telex: 22134

Graesser Laboratories Limited
Sandycroft, Deeside, Clwyd
UNITED KINGDOM
Tel.: 0244-531777
Telex: 61128

Great Lake Chemicals
P.O.Box 2200
West Lafayette, IN 47906
USA
Telex: 279428

R.W. Greef
1445 East Putnam Avenue
Old Greenwich, CONN 06870
USA
Tel.: 203-637-4371
Telex: 996609 rw greef oldg

Grindstead A/S
Edwin Rahra Vej 39
DK-8220 Brabrand
DENMARK
Telex: 64177 gvdan

Gruppo Lepetit SpA
Via R. Lepetit, 8
Casello Postale no 10468
200110 Milan
ITALY
Telex: 311054 lepni

GYMA Laboratories
65 Commercial Avenue
Garden City, NY 11530
USA
Tel. L 294-0900
Telex: 649246

Handok Remedía Ind.
344 Sangbong Dong, Dongdaemun Ku
P.O.Box Central 30
Seoul
SOUTH KOREA

Harbottle (Pharm.)
Seabright House
72-76 River Road
Barking, Essex
UNITED KINGDOM

Hefti Aktiengesellschaft
Postfach 1623
CH-8048 Zurich
SWITZERLAND
Tel.: 01-641340
Telex: 822225 hexa ch

Helm New York Chemical Corp.
1110 Centennial Avenue
Piscataway, NJ 08854
USA
Tel.: 201-981-1160
Telex: WU 642303

Henley and Co.
750 Third Avenue
New York, NY 10017
USA
Telex: 232210

Hetako S.A. Chemical Works
Avenue du Tribunal-Fédéral 34
CH-1005 Lausanne
SWITZERLAND
Tel.: 021-209301
Telex: 25548

Hickson and Welsh Limited
Castleford, West Yorkshire WF10 2JT
UNITED KINGDOM
Tel.: 0977-556565
telex: 55378

Hindustan Antibiotics Limited
Pimpri
Pune - 411 018
INDIA
Tel.: 82011
Telex: pn 0145-279

Hindustan Organic Chemicals Ltd.
Rasayani
Dist. Raigal, Maharastra
INDIA

Hoechst A.G. Pharma Fabrik
Postfach 800320
D-6230 Frankfurt am Main 80
FEDERAL REPUBLIC OF GERMANY
Tel.: 069 3051
Telex: 041234 hoeag d

F. Hoffmann-La Roche and Co. Ltd.
CH-4002 Basel
SWITZERLAND
Tel.: 061-271122
Telex: 62292

Honeywill and Stein
Greenfield House
Manor Road
Wallington, Surrey
UNITED KINGDOM

Hooker Chemicals
345 D Street
Niagara Falls, NY 14302
USA

Hopkin and Williams Ltd.
Freshwater Road
Dagenham, Essex RM8 1QJ
UNITED KINGDOM
Tel.: 590-7700
Telex: 24225 beihop

Hormonas y Vitaminas de Mexico S.A.
Paseo de la Reforma 449
Mexico 5, D.F.
MEXICO

Howard Hall International
223 East Putnam Avenue
Cascob, CONN 06807
USA

Human Institute for Serobacteriological
Production and Research
Szallas U. 5
H-1107 Budapest
HUNGARY
Telex: 4425

Hummel Chemicals
P.O.Box 250
10 Harwich Road
South Plainfield, NJ 07080
USA

ICC Handels
Neuer Wall 19
D-2000 Hamburg 36
FEDERAL REPUBLIC OF GERMANY

ICC Industries
Amsteldijk 166
Amsterdam
THE NETHERLANDS
Tel.: 448888
Telex: 14304

ICC Industries
720 Fifth Avenue
New York, NY 10019
USA
Telex: 234-194 RCA

ICFI SpA
Industrial Chimiche
Farmaceutiche Italiane
Via Bertola da Novate 14
20157 Milan
ITALY
Tel.: 02-3087341
Telex: 331541 tosifa i

ICI
Imperial Chemical Industries plc.
Millbank
London S.W. 1
UNITED KINGDOM
Tel.: 834-4444
Telex: 21324

IDPL
Indian Drugs and Pharmaceuticals Ltd.
P.O.Box 3816
New Delhi - 110 049
INDIA
Tel.: 393124
Telex: 031-2574 idpl in

Immuno A.G.
Industriestrasse 72
A-1220 Vienna
AUSTRIA
Tel.: 0222-235545
Telex: 132722 immuno

Imperial Chemical Industries
Bangladesh Manufacturers Limited
P.O.Box 48
Navayanganj
BANGLADESH
Telex: 65870 ici bj

INDENA (see also Inverni della Beffa)
Industria Derivali Naturali
Via Ripamonti 99
20141 Milan
ITALY
Tel.: 536312
Telex: 312535 idebefi

Industria Quimica Andina
Apartado Aereo 5967
Bogota
COLOMBIA
Telex: 44820

Instituto Biochimico Italiano SpA
Giovanni Lorenzini
Via Lorenzini 2/4
20139 Milan
ITALY
Tel.: 52531
Telex: 320367 ibilor

Instituto Chemioterapico Italiano
Via Emilia 99
20075 S. Grato, Lodi
ITALY
Tel.: 731-63661
Telex: 315106 chemio i

Interchem Corporation
120 Rt. 17, Paramus Plaza 2
Paramus, NJ 07652
USA
Telex: 134556

Instituto Franco Tozi SpA
Via Bertola da Novate 14
20157 Milan
ITALY
Tel.: 02-308-7341
Telex: 331541 tosifa

Institut Merieux
17 rue Bourgelat
F-69223 Lyon Cedex 1
FRANCE
Tel.: 7-8380610
Telex: 310627 im lyon

Instituto Seroterapico Milanese
Via Darwin 20/22
Milan
ITALY
Telex: 325649 ism

ISF SpA
Via Leonardo da Vinci 1
20090 Trezzano sul Naviglio
ITALY
Telex: 321469 isf i

Ishihara Sangyo Kaisha Ltd.
10-30 Fujimi, 2 Chome
Chiyoda Ku
Tokyo
JAPAN
Telex: 2324306 isk j

Italsintex SpA
Boro, Padova 38
Camposampiero, Padova
ITALY
Telex: 430881 sint

Iwaki and Company
4-1 Nihoubashi Honcho, Chuo-Ku
Tokyo 103
JAPAN

Iwata KK and Co.
3069 Nakaizumi Cho
Iwata City, Shizuoka
JAPAN
Telex: 05383, 5-5100

Janßen Pharmaceutica n.V.
Turnhoutseweg 30
B-2340 Beerse
BELGIUM
Tel.: 014/602111
Telex: 32540

Japan Hydrazine Co.
1-1 Uchisaiwai-cho, 2 chome
Chiyoda Ka
Tokyo 100
JAPAN
Telex: 222-4674

J.T. Baker Chemical Co.
222 Red School Lane
Phillipsburgh, NJ 08865
USA
Tel.: 201-859-2151

Jim Walter Resources Inc.
P.O.Box 5327
Birmingham, Alabama 35207
USA

K and K Greef Chemicals Ltd.
Suffolk House
George Street
Croydon CR9 3QL, Surrey
UNITED KINGDOM
Tel.: 686-0544
Telex: 28586 kkgrf g

K and K Laboratories
121 Express Street
New York, NY 11803
USA

Kabivitrum AB
S-11287 Stockholm
SWEDEN

Karl O. Helm
Nordkanalstrasse 28
P.O.Box 103060
D-2000 Hamburg 1
FEDERAL REPUBLIC OF GERMANY
Tel.: 040-2883-1
Telex: 02162941

Kawaza Sangyo
Takeda Building
9 Kandami Kua Cho
Chiyoda Ku
Tokyo 107
JAPAN

Kay Fries Chemicals
10 Link Drive
Rockleight, NJ 07647
USA

Kemika Industrial S.A.
Presa de Sta. Teresa 414
Col. Irrigación
Mexico 10, D.F.
MEXICO

Kemwel Ltd.
11 Tunkur Road
Yeswantpur
Bangalore - 560 022
INDIA

Kennedy and Klim Inc.
210 West Front Street
Red Bank, NJ 07701
USA
Tel.: 201-741-4920
Telex: 132403

Klockner and Co.
Postfach 10015, Klockner-Haus
D-4100 Duisberg 1
FEDERAL REPUBLIC OF GERMANY

Knoll AG
Postfach 210805
D-6700 Ludwigshafen
FEDERAL REPUBLIC OF GERMANY
Tel.: 5615-608

Kock Light Labs.
6 Willow Road
Colnbrook, Slough, Berk. SL3
UNITED KINGDOM

Korea Green Cross Corp.
729 Seochodong, Kangdu Ku
Seoul
KOREA

Kurogane Kasei Co. Ltd.
Hibi Cycle Building, 5-1 Nishiki-chome
Nakaku
Nagoya 460
JAPAN
Telex: 052-2311267

Kyowa Chemical Industries Co.
4-4-8 Uzn Wakayama City
Wakayama Pref. 641
JAPAN
Telex: 0734 6148

Laboratorio Gerado Ramon y Cia. S.A.I.C.
Intendente Amaro Avalos 4208
1605 Munro Pcia
Buenos Aires
ARGENTINA

Laboratoires de la Grange
39 Blvd. de Latour-Maubourg
F-75340 Paris 7
FRANCE

Laboratorio Farmacologico Milanese
Via Montevosso 273
121042 Caronno Pertusella VA
ITALY
Telex: 316649 lfms

Laboratorios Grifols, SA
C/ Jesus y Maria 6
Barcelona 22
SPAIN
Telex: 51090 ashe e

Laboratorios Almirall
C/ Cardoner 72-74
Barcelona
SPAIN

Laboratori Mag
Viale Gran Sasso 22
20131 Milan
ITALY
Tel.: 220673
Telex: 334886 labmag i

Laboratoires Sobio
15-25 Blvd. de l'Amiral Bruix
F-75782 Paris, Cedex 16
FRANCE
Tel.: 5021220
Telex: 613145

Lannacher Heilmittel
A-8502 Lannach/Stmk.
AUSTRIA
Telex: 031556

Laporte Industries
P.O.Box 8
Luton, Bedfordshire LU4 8EW
UNITED KINGDOM

Lars Christensen Chemicals ApS
33 Peter Bangs Vej
DK-2000 Copenhagen F.
DENMARK
Tel.: 451-864005
Telex: 22335

Leiras Pharmaceuticals
(see Huhtamäki Oy, Finland)

London Chemicals
Craven House
121 Kingway
London WC2B 6PR
UNITED KINGDOM

Lonza Ltd.
Muncherteinerstrasse 38
CH-4002 Basel
SWITZERLAND
Telex: 62323

J. and H. Lowenstein and Sons
420 Morgan Avenue
Brooklyn, NY 11222
USA
Telex: 235082 lowe

Lupin Laboratories
159 CST Road
Kalina, Santacruz (E)
Bombay - 400 098
INDIA
Tel.: 612-4-5-
Telex: 011-71587 lupin

Lux Chemicals
520 S El Camino Real, Suite 600
San Mateo, California 94402
USA
Tel.: 910-374-3011

Mallinckrodt Inc.
P.O.Box 5439
St. Louis, Missouri 63147
USA
Tel.: 314-895-2000
Telex: 44-7245

Marsing and Co. Ltd. A/S
Sjaellandsbroen 6
DK-2450 Copenhagen SV
DENMARK
Tel.: 45-1164444
Telex: 19925

Marsing Div., Instel Corporation
825 Third Avenue
New York, NY 10022
USA
Tel.: 758-5880
Telex: RCA 233182 iscur

Maypro Industries
11 Penn Plaza
New York, NY 10001
USA
Telex: 425160 maypro

May and Baker
Rainham Road South
Dagenham, Essex RM10 7XS
UNITED KINGDOM

McKesson Chemical Co.
1 Post St., Crocker Plaza
San Francisco, California 94104
USA

E. Merck
Postfach 4119
Frankfurtstrasse 250
D-6100 Darmstadt
FEDERAL REPUBLIC OF GERMANY
Tel.: 06151-720
Telex: 419328 em d

Merck Chemical Division
P.O.Box 2000
120 E Lincoln Avenue
Rahway, NJ 07065
USA
Tel.: 201-574-4000
Telex: 138825, 138818

Medimpex
Hungarian Trading Company for
Pharmaceutical Products
5, Vörösmarty tér 4
H-1808 Budapest
HUNGARY
Tel.: 183-955
Telex: 225477

- Chemical Works of Gedeon Richter Ltd.
1103 Budapest
Gyömrői ut 19-21
HUNGARY
Tel.: 477-330
Telex: 225067

- Chinoin Pharmaceutical and Chemical Works
1045 Budapest
T6 ytca 1-5
HUNGARY
Tel.: 292-900
Telex: 224236

- Egyt Pharmaceutical Works
1106 Budapest
Keresztúri ut 30-38
HUNGARY

- Alkeloida Chemical Factory
4440 Tiszavasvári
Kabay Janos utca 16
HUNGARY
Telex: 07 2374

• Biogal Pharmaceutical Works
4042 Debrecen
Pallagi utca 13
HUNGARY
Tel.: 11630, 13920

• Institute Human for Serio-
bacteriological Production and Research
2021 G8d8118
Tancsics Mihaly utca 82
HUNGARY
Tel.: 330-564, 487-927
Telex: 224425

Medosan spa
Via di Cancelleria 12
00040 Cecchina
P.O. 41
Albano Laziale
ITALY

Meiji Seiko Kaisha
4-16 Kyobashi, 2 Chome, Chu-Ku
Tokyo 104
JAPAN
Telex: 222-3351 emmesj

Medexport V.O.
Kahovka Str. 31
Moscow M-461
USSR
Telex: 411247 medex
411951

Medicuba
Calle 23
Vndada
Havana
CUBA

Miki Sangyo
747 Third Avenue
New York, NY 10017
USA
Telex: 127774

Mitsui Pharmaceuticals Inc.
12-2 Nikonbashi 3 Chome, Chuo Ku
Tokyo 103
JAPAN
Telex: 0222-3622 mitchem

Mitsui Toatsu Fine Chemicals
Toranomo Mitsui Building
3-8 Kasumigaski-3 chome-Chiyod-Ku
Tokyo 100
JAPAN

Mitsubishi Chemical Industries
Mitsubishi Building
5-2 Marunochi 2 Chome, Chiyoda Ku
Tokyo 100
JAPAN
Telex: 24901 bisichem j

Monsanto Limited
800-N Lindberg Building
St. Louis, Missouri 63167
USA
Tel.: 44-7282

Monsanto Europe SA
Avenue de Terruren 270
B-1150 Brussels
BELGIUM
Telex: 62927

Monsanto PLC
14 Tothill Street
London S.W. IH9LH
UNITED KINGDOM
Telex: 916093

Montedison spa
Foro Buenoaparte 31
20120 Milan
ITALY

Mitsui Co.
200 Park Avenue
New York, NY 10017
USA
Telex: 710-581-2788

Mercantile Development Inc.
274 Riverside Ave.
P.O.Box 2747
Westport, CT 06880
USA
Telex: 996431

Montoil Sarl
103 rue Reaumur
F-75002 Paris
FRANCE
Tel.: 2362041
Telex: 21007

Mustafa Nevzat Ilac Sanayii
A.S. Mecideyokoy
Yeniyol Sok No. 8
Istanbul
TURKEY
Telex: 26200 nec tr

MWM Chemicals
527 Madison Avenue
New York, NY 10017
USA
Telex: 420051

Nagase Company Ltd.
1-17 Shinmachi - 1 Chome
Nishiku
Osaka
JAPAN
Telex: 263423

Nordisk Gentoft
Niel Steensenvej
DK-2820 Gentoft
Copenhagen
DENMARK
Telex: 15001 insula

Napp Chemicals Inc.
199 Main Street
Lodi, NJ 07644
USA
Tel.: 773-3900
Telex: 134649 napp chem

Novo Industri A/S
Novo Allé
DK-2880 Bagsvaerd
DENMARK
Tel.: 02-982333
Telex: 37173

Nepora Chemicals-Schering AG
Rt. 17
Harriman, NY 10926
USA
Telex: twx 5102494847

Orgamol S.A.
Fabrication de Produits Chimiques
CH-1902 Evionnaz
SWITZERLAND
Telex: 38153

Nipa Laboratories GmbH und Holstein
Cremon 32
Jastram, Hans 200
Hamburg 11
FEDERAL REPUBLIC OF GERMANY

Organon Inc.
375 Mount Pleasant Avenue
West Orange, NJ 07052
USA
Telex: 136307

Nippon Kayaku Co.
New Kaijo Building 2-1
Marunouchi, 1 Chome, Chiyoda Ku
Tokyo C.P.O. 262
JAPAN
Telex: 2160461

N.V. Organon
P.O.Box 20
Kloosterstraat 6
NL-5340 BH Oss
THE NETHERLANDS
Tel.: 4120-61222
Telex: 37500

Nippon Nyukazai and Co.
9-19, Ginza 3 Chome Ku
Tokyo 104
JAPAN
Tel.: 03-543-8572

Oriol Pharmaceutical
P.O.Box 10019
SF-00101 Helsinki-10
FINLAND
Tel.: 90-71-7411
Telex: 12721

Nippon Synthetic Chemicals
9-6 Nozaki Cho, Kita-Ku
Osaka 530
JAPAN

Orlex Chemicals Corp.
39-40 Route 4
Fairlawr, NJ 07410
USA
Telex: 130429 orlex

Nissan Chemical Industries
Kowa Hitosubashi Building
7-1 Kanda Nishiki-Cho, 3 Chome
Chiyoda Ku
Tokyo 101
JAPAN
Telex: 222-3071

Orsabe S.A.
Eje Norte Sur y Sur Calle 13 Este
Cd. Industrial del Valle de
Cuernavaca, Morelos
Mexico D.F.
MEXICO

Osaka Soda Co.
6 Kitahama, 3 Chome
Higashi Ku
Osaka 540
JAPAN

Otsuka Chemicals
10 Bungo Machi, Higashi Ku
Osaka
JAPAN
Telex: 63586 jp otsuka

Oxyde Joba
Postbus 7886
NL-1008 AB Amsterdam
THE NETHERLANDS
Tel.: 020-448877
Telex: 11410

Oy Roht > AB
P.O. Box 35
SF-10601 Tammissaari
FINLAND
Tel.: 911-12820
Telex: 13160 rohto sf

Pacific Gateway
1 Maritime Plaza
San Francisco, California 94111
USA
Telex: TWX 470080 tmks

Pan Britannica Industries Ltd.
High Street
Waltham Cross, Herts. EN8 7DY
UNITED KINGDOM
Telex: 23957

Paul Eruns
Deichstrasse 29
P.O.Box 112266
D-2000 Hamburg 11
FEDERAL REPUBLIC OF GERMANY

PenickCorp
1050 Wall Street
W. Lyndhurst, NJ 07071
USA
Telex: WU 178077 (TRT)

Pentagon Chemicals
Northside Workington
Cumbria, CA14 JJ
UNITED KINGDOM

Pfanstiehl Laboratories
1219 Glen Rock Avenue
Waukegan, IL 60085
USA
Telex: 253672 plal lab

Pfister Chemicals Inc.
Linden Ave.
Ridgefield, NJ 07657
USA
Tel.: 945-5400

Pfizer International Inc.
235 East 42 Street
New York, NY 10017
USA
Tel.: 212-573-3677

Pharmchem Laboratories
130 Welsley Street
S. Hackensack, NJ 07606
USA
Telex: TWX 7109905026

Pharmachim
16 Iliensko Chaussee
Sofia 1080
BULGARIA
Tel.: 385531
Telex: 22097, 22098

Philipps Duphar n.v.
P.O.Box 7006
Apoollolaan 151
Amsterdam
THE NETHERLANDS

Philipp Brothers Chemicals
10 Columbus Circle
New York, NY 10019
USA
Telex: 235002

Pierrel SpA
Via Comelico 39/41
20135 Milan
ITALY
Tel.: 02/57901
Telex: 310015 pierrel

Pioneer Salts and Chemicals
940 N. Delaware Avenue
Philadelphia, PA
USA

Plantex Inc.
319 Knickerbocker Ave.
Hilldale, NJ 07642
USA
Telex: 134462

Pliva Pharmaceutical Company
I.L. Ribara 89
Y-41000 Zagreb
YUGOSLAVIA
Tel.: 571-666
Telex: 21-246, 21-305

Priti Organics PVT Ltd.
Plot No. 769 GIDC
40 Sheds, Vapi, District Valsad
Gujarat State
INDIA
Tel.: 1556
Telex: 0173-295 popl in

Produits Chimiques Uguine Kuhlmann
Tour Manhattan, Cedex 21
F-92087 Paris La Defense 2
FRANCE

Productos Roche Quimicos
e Farmaceuticos
Rua General Canabarro 666
20272 Rio de Janeiro
BRAZIL

Productos Quimicos Finos
Opoterapicos S.A.
Av. Juarez 134-1º Deleg. Cuauhtemoc
Mexico 1 D.F. 06030
MEXICO
Tel.: 017-76-221 proqme

Proter SpA
Via Lambro 38
20090 Opera, Milan
ITALY
Tel.: 02/5240241
Telex: 321632 proter

PPG Industrial Chemicals
1 Gateway Centre SN
Pittsburgh, PA 15272
USA

Quimica Farmaceutica Platense SAIC
Jose Barros Pazos 5531
1439 Buenos Aires
ARGENTINA

Quimica Siul SAIC
Kennedy y Onelli
1644 Victoria, Buenos Aires
ARGENTINA

Quimica Lorenzini SA
Av. Casa Grande 2.021, Piraporinha
09900 Diadema, San Pablo
BRAZIL

Quimio Productos Quimicos
Comercio y Industria SA
Rua do Rocha 155
20960 Rio de Janeiro
BRAZIL
Telex: 2209E

Quinonas de Mexico
Zinc No. 58 Fracc. Esfuerzo Nacional
Xalostoc. Edo. de Mexico
Mexico, D.F.
MEXICO

Ranbaxy Laboratories Limited
78 Nehru Place
New Delhi - 119 910
INDIA
Tel.: 646417, 646160
Telex: 312715 rlab in

Raptakos Brett
47 Dr Anni Beasant Road
Worli, Bombay - 400 025
INDIA

Ravit SpA
Casella postale 12084
00100 Rome
ITALY

Reilly Tar and Chemicals
Market Square Building
151N Delaware Street, Suite 1510
Indianapolis, IN
USA
Telex: 27404 retar comcen

Rexolin Chemicals
P.O.Box 622
S-25106 Helsingborg
SWEDEN
Tel.: 042-261460
Telex: 72353 rexolin

Rhodia SA
Av. Maria Coelho de Aguiar 215
Bloco B
05804 San Pablo
BRAZIL

Rhone Poulenc Santé
Cedex No. 29
F-92097 Paris - la Défense
FRANCE
Tel.: 1-768 1234
Telex: 610 500 rhone f

Riken Vitamin Co.
8-10 Nishi Kanda, 3 Chome
Chiyoda-Ku
Tokyo 101
JAPAN
Telex: 4322167

Rivopharm SA
Rivopharm Building
CH-6911 Mann-Lugano
SWITZERLAND
Tel.: 091-592701
Telex: 73227 farma ch

Roper Italiana SpA
Via Valosa di Sopria 9
20052 Monza (Mi)
ITALY
Telex: 334634 ropr i

Roussel Uclaf
35 Boulevard des Invalides
F-75007 Paris
FRANCE
Tel.: 555-9155
Telex: 200675 f

Roussel Corporation
155 East 44 Street
New York, NY 10017
USA
Tel.: 212-697-5820
Telex: 423187

Roquette Corp.
1550 Northwestern Ave.
Gurnee, IL 60031
USA
Telex: 206936 roqil

R.P. Chemicals
414 State College Building
Anaheim, California 92806
USA

R.S.A. Corporation
690 Sawmill River Road
Ardsley, NY 10502
USA

Salsbury Laboratories Inc.
Charles City, Iowa 50616
USA

Salicilatos de Mexico SA
Av. Oriente 171, No. 435
07820 Mexico, D.F.
MEXICO
Tel.: 760-5400

Samil SpA
Via Gerano 5
00156 Rome
ITALY

Sanofi
39 Avenue Pierre Ier de Serbie
F-75008 Paris
FRANCE

Sarabhai Research Centre
P.O.Box 80
Wadi Wadi, Barodi - 390 007
Gujarat
INDIA

Sanquison Medicinal GmbH
Esternmanstrasse 17
A-4020 Linz
AUSTRIA

Säurefabrik Schweizerhall
CH-4133 Schweizerhalle
SWITZERLAND
Telex: 968016 ch

Scharper
745 Fifth Avenue, Suite 403
New York, NY 10051
USA
Telex: 126421

Schuchardt Dr. Theodor
Chemische Fabrik
Eduard Buchnerstr. 14-20
D-8011 Hohenbrunn
FEDERAL REPUBLIC OF GERMANY
Telex: 528315 schu d

Schering AG
Postfach 650311
D-1000 Berlin 65
FEDERAL REPUBLIC OF GERMANY
Tel.: 468-56-05
Telex: 1820335 sch d

Seitetsu Kagaku Co
The New Sumitomo Building No. 2
22, 5 Chome, Kitahama
Higashi Ku
Osaka
JAPAN

Schweiz-Serum
Postfach 2707
CH-3001 Berne
SWITZERLAND

Sefton Ltd.
Greenford Road,
Greenford. Middlesex UB6 OHE
UNITED KINGDOM
Tel.: 01-422-3434
Telex: 22134

Sembodja Holland b.v.
Wildenborch 9
1100 Av. Amsterdam, Zuidoost
THE NETHERLANDS
Tel.: 020-952221
Telex: 11486 semb nl

SEIA
59 rue La Boetie
F-75008 Paris
FRANCE

Sero
Serotherapeutisches Institut
Triesterstr. 50
A-1100 Vienna
AUSTRIA
Tel.: 641356
Telex: 01-33404

Seven Star
2-3 Pei Po Village
Taipei
TAIWAN

Shell Chemicals
Shell Plaza
Houston, Texas 77002
USA

Sherman Chemicals Ltd.
Sanderland Road
Sandy, Bedfordshire
UNITED KINGDOM
Telex: 825743

Sherwin Williams Chemicals
P.O.Box 6520
Cleveland, Ohio 44101
USA

Shinpoong Pharmaceuticals
115-18 Myunmok 1 Dong
Dongdaemun-ku
Seoul
KOREA

Signa SA
Calz. Miguel Angel de Quevedo 8
5º piso
Mexico, D.F.
MEXICO

Signo Trading Int.
208 South 14 Street
Mount Vernon, NY 10550
USA

Siemsglüss and Son
Heidenkampsweg 84
D-2000 Hamburg 1
FEDERAL REPUBLIC OF GERMANY
Tel.: 040-280-1041
Telex: 02-162199

Silanes Labs. SA
Amores No. 1304
03100 Mexico, D.F.
MEXICO
Telex: 1776245

Sintesis Quimica S.A.
Edificio Ejecutivo Pardo
Jr. Bolognesi no. 125, Of. 1101
Lima 18
PERU
Telex: 20355 Sinquisa

Sintebras S.A.
Av. 9 de julho, 5.627, 8º andar
CEP 01407 Sao Paulo
BRAZIL
Tel.: 881-0053
Telex: 32705 sanf br

Société Chimique Pointet Girard s.a.
35 avenue Jean Jaurès
F-92390 Villeneuve La Garenne
FRANCE
Tel.: 798 17 17
Telex: 6107 19 pgchimie

Sintequir 3A
Rua Gonçalves Chaves 3.200
96100 Pelotas
Rio Grande do Sul
BRAZIL

Société Bristol Meyer
17-19 Avenue Montagne
F-75008 Paris
FRANCE

Sociedad Mexicana de Química Industrial S.A.
Tecoyotitla 412
Apdo. postal 20-299
Mexico 20, D.F.
MEXICO

Southland Corporation
Alphano Road
Great Meadows, NJ 07838
USA

Squibb Sons
P.O.Box 4000
Princeton, NJ
USA

Sree Krishna Pharmaceuticals Ltd.
C-4 Industrial Area, Uppal
Hyderabad - 500 039
INDIA
Tel.: 851680

S.S.T. Corporation
1373 Broad Street
P.O.Box 1649
Clifton, NJ 07015
USA
Tel.: 201-473-4300
Telex: 133342

Standard Chlorine Chemicals
1035 Bellevue Turnpike
Kearny, NJ 07032
USA
Tel.: 201-997-1700
Telex: 138345

Steetley Chemicals
Berk House
P.O.Box 56
Basing View
Basingstoke, Hants RG21 2EG
UNITED KINGDOM
Tel.: 0256-29292
Telex: 858371

Sterling Organics Ltd.
Dudley, Cramlington
Northumberland NE237QG, Newcastle
UNITED KINGDOM
Tel.: 0632-500471
Telex: 537197 sterga

Sterling Drug Inc.
90 Park Avenue
New York, NY 10016
USA
Tel.: 907-2373
Telex: 422850

Stinnes Chemicals
750 Third Avenue
New York, NY 10017
USA
Telex: 147262

Stip Lab. Chim. Biol.
Lungarno Gambacorti 55
56100 Pisa
ITALY
Tel.: 050/28228

Sudamfos SA
Av. de Trabajo 5252
1439 Buenos Aires
ARGENTINA

Suneeta Laboratories Ltd.
502 Arun Chambers
J. Dadajee Road
Bombay - 400 034
INDIA
Tel.: 379118
Telex: 0114301 snlb in

Sumitomo Chemical Co.
New Sumitomo Building
15 Kitahana, 5 Chome Higashi Ku
Osaka 541
JAPAN
Telex: 63823 sumika

Swiss Explosive Works (SSF Duttikon)
CH-5605 Duttikon
SWITZERLAND
Tel.: 057-261155
Telex: 52694 fasex ch

Synbiotics Ltd.
P.O.Box 139
Wadi Wadi, Baroda
INDIA

Sydney Ross
Av. Rio Branco 251, 10º andar
20040 Rio de Janeiro
BRAZIL

Syntex SA
Cerrada de Bezares 9
Lomas de Bezares
Mexico 10, D.F.
MEXICO

Synthetic A/S
Edwin Rahrs Vej 38
DK-8220 Brabrand
DENMARK
Telex: 64177

SOIBB S.p.A.
V. Paolo di Dono, 73
00142 Rome
ITALY
Tel.: 54701
Telex: 610156 sqibb i

Takeda Chemical Industries Ltd.
12-10 Nikonbashi 2-Chome
Chuo-Ku
Tokyo 103
JAPAN
Tel.: 03-278-2281
Telex: 24252 takeda j

Tanabe Chemicals
P.O.Box 85132
San Diego, CA 92138
USA

Texaco Chemicals
P.O.Box 430
4800 Fournace Place
Bellaire, Texas
USA
Tel.: 714-898-9278
Telex: 762-651

Themis Organic Chemicals
38 Suren Road, Andheri (East)
Bombay - 400 093
INDIA

Thomason and Joseph
119 Plumstead Road
Norwich NR1 4JT
UNITED KINGDOM
Telex: 97291 kimick

Tokyo Hydrazine Industry Co.
Shin Tokyo Building
3-1 Marunochi-3-chome
Chiyoda Ku
Tokyo 100
JAPAN

Tokyo Tanabe Co.
2-7-3 Nikonbashi Hon-Cho-2 chome
Chuo-ku
Tokyo 103
JAPAN
Telex: 22163 j

Transmedica
P.O.Box 305425
Grosse Bleichen 16
D-2000 Hamburg 36
FEDERAL REPUBLIC OF GERMANY
Tel.: 040-341427
Telex: 2173727

Troponwerk GmbH
Posifach 601060
Berlinerstr. 156
D-5000 Cologne 80
FEDERAL REPUBLIC OF GERMANY
Telex: 8873474 d

UCB Chemical Sector
326 Ave. Louise
B-1050 Bruxelles
BELGIUM
Telex: 21280 a ucb

Union Carbide
Old Ridgebury Road
Danbury, CT 06817
USA

Union Carbide Ltd.
95A High Street
Rickmansworth, Herfordshire WD3 1EE
UNITED KINGDOM

Union Carbide Europe S.A.
5 rue Pedro Meylan
CH-1211 Geneva 17
SWITZERLAND

Union Fine Chemicals
2-3 Shingil Dong, Youngdengpoku
P.O.Box Centrai 2940
Seoul
SOUTH KOREA

United Mineral and Chemicals
129 Hudson Street
New York, NY 10013
USA
Telex: 232685 umcur

United States Biochemicals
2100 Mile Parkway
Cleveland, Ohio 44126
USA
Telex: 980718

R.W. Unwin
Prospect Place
Welwyn, Herts.
UNITED KINGDOM
Tel.: 043871 6441
Telex: 24903, 826371

Universal Preservechem Inc.
284 North Sixth Street
Brooklyn, NY 11211
USA

Upjohn International
Kalamazoo, MI 49001
USA
Tel.: 323-5844
Telex: 224-426 uniti kmz

Van Epenhuysen Chem. Fabriken
Noordweg 3
P.O.Box 11
Zwijndrecht
THE NETHERLANDS

Vecchi and Piam Sas
Via Padre G. Semeria 5
16131 Genova
ITALY
Tel.: 010-360641
Telex: 270060 pp gec1

Versaillaise de Produits Chimiques
24 Champs Elysées
Paris 8e
FRANCE
Tel.: 3594723
Telex: 640061 f

Vitamins Inc.
200 East Randolph Drive
Chicago, IL 60601
USA
Tel.: 312-861-0700
Telex: 25-4717

Vita Pharm. SpA
Via Boucheron 14
10122 Torino
ITALY

Wacker Chemie
Prinzregentenstrasse 22
D-8000 Munich 22
FEDERAL REPUBLIC OF GERMANY
Telex: 529121

Wall Chemical Corporation
P.O.Box 583
Westfield, NJ 07090
USA
Telex: 139316

Wander GmbH
Donaustadtstrasse 45
A-1221 Vienna
AUSTRIA

Wander Chemie A.G.
Via Serafino Balestra
CH-6601 Locarno
SWITZERLAND

Ward Flenkinsop and Co. Ltd.
Halebank, Lower Road
Widnes, Cheshire WA8 8NS
UNITED KINGDOM
Tel.: 051-424-3671
Telex: 629491/2

Weddle Pharm. Ltd.
Red Willow Road
Wrexham Ind.Estate
Wrexham, Cloyd CL13 9PX
Wales
UNITED KINGDOM

Wellcome Foundation Ltd.
Temple Hill
Dartford, Kent DA1 5AH
UNITED KINGDOM
Tel.: 23488
Telex: 896758

Westco Chemicals
11312 Hartland Street
North Hollywood, CA 91605
USA
Telex: wu 673150

Whitecourt Ltd.
832 High Road
London N12 9RA
UNITED KINGDOM
Telex: 262634

Wilshire Chemicals Co.
15324 S-Broadway
Gardena, CA 90248
USA
Tel.: 910-346-6722

WNC Nitrochemie GmbH
D-8261 Aschau/Inn
FEDERAL REPUBLIC OF GERMANY
Tel.: 08638-68280
Telex: 05 6435

Wyeth Laboratories
P.O.Box 8299
Philadelphia, PA
USA

Wynmouth Lehr and Fatoil Ltd.
158 City Road
London EC4 2PA
UNITED KINGDOM
Telex: 28293

Welding GmbH and Co.
Postfach 30 58 40
Gr. Theaterstrasse 50
D-2000 Hamburg 36
FEDERAL REPUBLIC OF GERMANY
Tel.: 35 90 81
Telex: 2 13181 wco d

Yang Pharm. Ind.
24-5 Hawologk dong
Sungbuk Ku
Seoul
SOUTH KOREA

Yokkaichi Chemical Co.
1, Miyahigishi-Cho-2Chome
Yokkaichi City
Mie Pref.510
JAPAN

Yoshitomi Pharm.Ind.
3-35 Hirano Machi, Higashi ku
Osaka 541
JAPAN

YuYu Industria Co.
148 Anguk-dong, Chongro-ku
P.O.Box Central 140
Seoul 110
SOUTH KOREA

ABBREVIATIONS AND DEFINITIONS

a) Abbreviations:

B.P.	-	British Pharmacopoeia
E.P.C.	-	British Pharmaceutical Codex
Eur.P.	-	European Pharmacopoeia
F.P.	-	French Pharmacopoeia
I.P.	-	International Pharmacopoeia
Ind.P.	-	Indian Pharmacopoeia
Mex.P.	-	Mexican Pharmacopoeia
N.F.	-	National Formulary
U.S.P.	-	United States Pharmacopoeia

b) Short definitions:

Pharmaceutical Chemical

Pharmaceutical Chemical is a therapeutically active substance which is used after conversion into standard pharmaceutical dosage forms.

Intermediate

Organic chemical reactant used for the production of Pharmaceutical Chemicals.

Raw Material

Substance of chemical or biological origin used in processing for production of intermediate substances required for Pharmaceutical Chemicals.

c) Comprehensive definitions:

PHARMACEUTICAL DRUG (drug preparation, drug product, pharmaceutical, pharmaceutical dosage form, pharmaceutical dose form product, pharmaceutical preparation, pharmaceutical product, dose form, medicine) is the safe and effective finished, or partially finished (e.g., as in the case of a solid to be constituted into a solution for administration) product for use on or for humans, or other end-user, or animals to modify or explore physiological systems or pathological states for the benefit of the recipient.

ESSENTIAL DRUGS are those included in WHO's Model List of Essential Drugs.

PHARMACEUTICAL CHEMICAL (active ingredient, active constituent, active principle, or active substance of drugs, bulk drug, bulk chemical, bulk medicinal, basic medicinal, medicinals, medicinal chemical, pharmaceutical bulk substance) is a chemical substance, or a mixture of such substances the composition of which has not completely been elucidated but the quality of which has been specified in the pharmacopoeias and formularies. Pharmaceutical chemicals are the major inputs for the manufacture of drugs and their end-user is mostly the pharmaceutical industry, but customers include also the hospitals, wholesalers and pharmacies.

PHARMACEUTICAL INTERMEDIATES are organic chemical reactants used for the production of pharmaceutical chemicals.

PHARMACEUTICAL RAW MATERIALS are inorganic chemical reactants and organic solvents used in the production of pharmaceutical chemicals.

EXTRACTIVES are prepared from vegetable and animal materials. Extractives are used as an input for the preparation of drugs.

PHARMACEUTICALS is a collective term for drugs, pharmaceutical chemicals and extractives.

ABREVIATIONS ET DEFINITIONS

a) Abréviations

B.P.	- British Pharmacopoeia
B.P.C.	- British Pharmaceutical Codex
Eur.P.	- European Pharmacopoeia
F.P.	- French Pharmacopoeia
I.P.	- International Pharmacopoeia
Ind.P.	- Indian Pharmacopoeia
Mex.P.	- Mexican Pharmacopoeia
N.F.	- National Formulary
U.S.P.	- United States Pharmacopoeia

b) Définitions succinctes

Produits chimiques à usage pharmaceutique

Substances thérapeutiquement actives utilisées après transformation sous la forme de formes pharmaceutiques normalisées.

Produits intermédiaires

Produits chimiques organiques réactifs utilisés pour la production de produits chimiques à usage pharmaceutique.

Matières premières

Substances d'origine chimique ou biologique utilisées dans la fabrication de produits intermédiaires nécessaires pour l'obtention de produits chimiques à usage pharmaceutique.

c) Définitions détaillées

PRODUITS PHARMACEUTIQUES (médicaments, doses pharmaceutiques, préparations pharmaceutiques, produits pharmaceutiques, remèdes) : produits finis ou partiellement finis (cas, par exemple, des solides à administrer en solution) présentant les conditions nécessaires de sécurité et d'efficacité, destinés à être utilisés sur des humains ou des animaux pour modifier ou étudier des systèmes physiologiques ou des états pathologiques pour le bien du sujet.

MEDICAMENTS ESSENTIELS : médicaments figurant sur la liste type des médicaments essentiels de l'OMS.

PRODUITS CHIMIQUES A USAGE PHARMACEUTIQUE (ingrédients actifs, constituants actifs, principes actifs ou substances actives des médicaments, médicaments en vrac, produits chimiques en vrac, etc.) : substances chimiques ou mélanges de substances chimiques dont la composition n'est pas complètement indiquée mais dont la qualité est spécifiée dans les pharmacopées et les formulaires. Les produits chimiques à usage pharmaceutique sont la principale matière première utilisée pour la fabrication de médicaments. Ils sont donc surtout utilisés par l'industrie pharmaceutique, mais ils peuvent également être achetés par les hôpitaux, les marchands en gros et les pharmacies.

PRODUITS INTERMEDIAIRES : produits chimiques organiques réactifs utilisés pour la production de produits chimiques à usage pharmaceutique.

MATIERES PREMIERES A USAGE PHARMACEUTIQUE : réactifs chimiques inorganiques et solvants organiques utilisés pour la production de produits chimiques à usage pharmaceutique.

EXTRAITS : préparations à base de matières végétales et animales, utilisées pour la fabrication de médicaments.

SUBSTANCES PHARMACEUTIQUES : terme générique désignant les produits pharmaceutiques, les produits chimiques à usage pharmaceutique et les extraits.

ABREVIATURAS Y DEFINICIONES

a) Abreviaturas:

B.P.	-	Farmacopea británica
B.P.C.	-	Código farmacéutico británico
Eur.P.	-	Farmacopea europea
F.P.	-	Farmacopea francesa
I.P.	-	Farmacopea internacional
Ind.P.	-	Farmacopea india
Mex.P.	-	Farmacopea mexicana
F.N.	-	Formulario nacional
U.S.P.	-	Farmacopea estadounidense

b) Definiciones breves:

Producto químico farmacéutico

El producto químico farmacéutico es una sustancia terapéuticamente activa que se utiliza una vez convertida en formas farmacéuticas dosificadas normalizadas.

Producto intermedio

Reactivo químico orgánico utilizado para la fabricación de productos químicos farmacéuticos.

Materia prima

Sustancia de origen químico o biológico que se procesa para la producción de sustancias intermedias necesarias para la fabricación de productos químicos farmacéuticos.

c) Definiciones generales:

MEDICAMENTO FARMACEUTICO (preparado, droga, fármaco, forma farmacéutica dosificada, producto de forma farmacéutica dosificada, preparado farmacéutico, producto farmacéutico, forma dosificada, medicamento) es el producto inocuo y eficaz, acabado o parcialmente acabado (por ejemplo, en el caso de un sólido que ha de constituirse en una solución para ser administrada) que se utiliza en el ser humano u otro usuario final, o en los animales, a fin de modificar o explorar los sistemas fisiológicos o estados patológicos en beneficio del receptor.

MEDICAMENTOS ESENCIALES son los que se incluyen en la Lista Modelo de Medicamentos Esenciales, de la OMS.

PRODUCTO QUÍMICO FARMACEÚTICO (ingrediente activo, constituyente activo, principio activo, o sustancia activa de medicamentos, medicamento a granel, producto químico a granel, producto medicinal a granel, producto medicinal básico, productos medicinales, producto químico medicinal, sustancia farmacéutica a granel) es una sustancia química, o una mezcla de las sustancias, cuya composición no ha sido determinada por completo pero cuya calidad ha sido especificada en las farmacopeas y los formularios. Los productos químicos farmacéuticos son los principales insumos para la preparación de medicamentos y su usuario final, en la mayoría de los casos, es la industria farmacéutica, aunque también pueden serlo los hospitales, vendedores al por mayor y farmacias.

PRODUCTOS FARMACEÚTICOS INTERMEDIOS son reactivos químicos orgánicos utilizados para la fabricación de productos químicos farmacéuticos.

MATERIAS PRIMAS FARMACEÚTICAS son reactivos químicos inorgánicos y solventes orgánicos utilizados en la fabricación de productos químicos farmacéuticos.

Los EXTRACTOS se preparan a partir de materias vegetales y animales. Se utilizan como insumo para la preparación de medicamentos.

Los FARMACOS son un término colectivo que se aplica a los medicamentos, productos químicos farmacéuticos y extractos.

List of pharmaceutical chemicals, their intermediates and raw materials included in this Directory

Liste des produits chimiques à usage pharmaceutique, de leurs produits intermédiaires et de matières premières

Lista de productos químicos farmacéuticos, sus productos intermedios y materias primas que figuran en la Guía

A. Pharmaceutical Chemicals

A. Produits chimiques à usage pharmaceutique

A. Productos químicos farmacéuticos

<u>English</u>	<u>French</u>	<u>Spanish</u>
<u>Anglais</u>	<u>Français</u>	<u>Espagnol</u>
<u>Inglés</u>	<u>Francés</u>	<u>Español</u>
Acetylsalicylic acid	Acide acétylsalicylique	Acido acetilsalicílico
Ampicillin	Ampicilline	Ampicilina
Ascorbic Acid	Acide ascorbique	Acido ascórbico
Benzyl Penicillin	Benzylpénicilline	Benzilpenicilina
Chloroquine Phosphate	Phosphate de chloroquine	Fosfato de cloroquina
Dapsone	Dapsone	Dapsona
Diethylcarbamazine	Diéthylcarbamazine	Diétilcarbamazina
Erythromycin	Erythromycine	Eritromicina
Ethambutol	Ethambutol	Etambutol
Ethinylestradiol	Ethinylestradiol	Etinilestradiol
+ Norgestrel (Levo)	+ Levonorgestrel	+ levo-Norgestrel
Furosemide	Furoséide	Furosemida
Hydralazine	Hydralazine	Hidralazina
Hydroxocobalamin	Hydroxocobalamine	Hidroxocobalamina
Insulin	Insuline	Insulina
Isoniazid	Isoniazide	Isoniazida
Mebendazole	Mébendazole	Mebendazol
Paracetamol	Paracétamol	Paracetamol
Piperazine	Pipérazine	Piperazina
Plasma Fractions	Fractions plasmatiques	Fracciones de plasma
Primaquine	Primaquine	Primaquina
Propranolol	Propanolol	Propanolol
Reserpine	Réserpine	Reserpina

<u>English</u>	<u>French</u>	<u>Spanish</u>
<u>Anglais</u>	<u>Français</u>	<u>Espagnol</u>
<u>Inglés</u>	<u>Francés</u>	<u>Español</u>
Retinol	Rétinol	Retinol
Streptomycin Sulphate	Sulfate de streptomycine	Sulfato de estreptomicina
Sulphadimidine	Sulfamidine	Sulfadimidina
Tetracycline	Tétracycline	Tetraciclina
B. <u>Intermediates and Raw Materials</u>		
B. <u>Produits intermédiaires et matières premières</u>		
B. <u>Productos intermedios y materias primas</u>		
Acetic Anhydride	Anhydride acétique	Anhídrido acético
Acetyl Acetone	Acétylacétone	Acetilacetona
Acetanilid	Acétanilide	Acetanilida
Alpha-Nepthol	Alpha-naphtol	Alfanaftol
6 Amino Penicillanic Acid	Amino-6 pénicillanique	Acido 6 aminopenicilánico
P Aminophenol	p-aminophénol	P Aminofenol
D-2-Aminobutanol	2-amino-1-butanol	D-2-Aminobutanol
P-Anisidine	p-anisidine	P-Anisidina
Diethyl-Ethoxy Methylene-Malonate Ester	Malonate de diéthyl-éthioxyméthylène (Ester)	Ester de etoximetil-enmalonato de dietilo
N:N Dimethylaniline	N,N-Diméthylaniline	N,N Dimetilanilina
Diphenyloxide	Oxyde de diphényl	Oxido de difenilo
Epichlorohydrin	Epichlorhydrine	Epiclorohidrina
Erythromycin Thiocynate	Thyocynate d'érythromycine	Tiocinato de eritromicina
Estrone/Estradiol and Salts/Esters	Estrone/Estradiol et sels/Esters	Estrona/Estradiol y Sales/Esteres
Ethylene Chloride/Ethylene/Diamine Hydrochloride	Chlorure d'éthylène/Hydrochlorure d'éthylénodiamine	Cloruro de etileno/Hidrocloruro de etilendiamina
M Chloroaniline	m-chloroaniline	M Cloroanilina
Chloroanthranilic Acid	Acide chloroanthranilique	Acido cloroantranílico
P Chloronitrobenzene	p-chloronitrobenzène	P Cloronitrobenzeno
Chlorosulphonic Acid	Acide chlorosulfonique	Acido clorosulfónico
3:4 Diaminobenzo-phenone	Diamino-3,4 benzophénone	3,4 Diaminobenzofenona
4:4 Dichlorodiphenylsulfone	Dichloro-4,4 diphénylsulfone	4,4 Diclorodifenilsulfona
4:6 Dichlor-3 Sulfamoyl-benzoic Acid	Acide dichloro-4,6 sulfamoyl-5, benzoïque	4,6 Acido 3 dicloro sulfamilbenzoico

<u>English/Anglais/Inglés</u>	<u>French/Français/Francés</u>	<u>Spanish/Espagnol/Español</u>
4:7 Dichloroquinoline	Dichloro-4,7 quinoline	4,7 Dicloroquinolina
Dicyandiamide	Dicandyamide	Diciandiamida
Diethylcarbamylchloride	Chlorure de diéthylcarbamyle	Cloruro de carbamildietilo
Ethylene Dichloride	Dichlorure d'éthylène	Dicloruro de etileno
Gamma Picoline	Gamma-picoline	Gamma picolina
Guanidine Nitrate	Nitrate de guanidine	Nitrato de guanidina
Hydrazine Hydrate	Hydrate d'hydrazine	Hidrato de hidrazina
Isonicotinic Acid	Acide isonicotinique	Acido isonicotínico
Isopropylamine	Isopropylamine	Isopropilamina
Methylchloroformate	Chloroformiate de méthyle	Cloroformiato de metilo
1 Methylpiperazine- Hydrochloride	Hydrochlorure de méthyl-1 + pipérazine	Hidrocloruro de 1 metilpiperazina
P Methoxy-o-Nitroaniline	p-méthoxy-o-nitroaniline	P Metoxi-O-nitroanilina
Mono ethanolamine	Monoéthanolamine	Monoetanolamina
1:4 Nitrobenzene	1,4-nitrobenzène	1,4 Nitrobenceno
Novaldiamine (1 Diethylamino- 4-amino pentane)	Novaldiamine (Diéthylamino-1 amino-4 pentane)	Novaldiamina (1 Dietil- amino-4- aminopentano)
Phthalazone	Phatalazone	Ftalazona
D Phenylglycine	d-phénylglycine	D Fenilglicina
Salicylic Acid	Acide salicylique	Acido salicílico
Sorbitol	Sorbital	Sorbitol
Sulfanilic Acid	Acide sulfanilique	Acido sulfanílico
Sulphurylchloride	Chlorure de sulfuryle	Cloruro sulfúrico
Sulphaguanidine	Sulfaguanidine	Sulfaguanidina
Tetracycline Arquad Salt/ Tetracycline Urea Complex/ Demethylchlortetra Cycline Urea Complex	Tétracycline Arquad Salt/ Complexe tétracycline urée/ Complexe déméthylchlor- tétracycline urée	Sal de arquad para tetra- ciclina/Complejo de urea para tetraciclina/ Complejo de urea para demetilclortetraciclina



To augment our efforts to improve the Directory of Sources of Supply for its usefulness, we would appreciate your cooperation in completing the questionnaire given below and returning it to UNIDO, Negotiations Branch, P.O.Box 300, A-1400 Vienna, Austria.

QUESTIONNAIRE

Directory of Sources of Supply for Pharmaceutical Chemicals and their Intermediates

- | | YES | NO |
|---|--------------------------|--------------------------|
| 1. Was the information contained in the Directory useful? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Was the information provided new to you? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Has any difficulty been encountered in making contacts with the suppliers listed in the Directory? If yes, please give details. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Has the information provided been useful to you in facilitating procurement and reduction of material and product cost? If yes, please give details. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Do you have any suggestions to improve the usefulness of the Directory? If yes, please elaborate. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are you in contact with other sources of supply not included in the Directory? If yes, please provide its name, address and product. | <input type="checkbox"/> | <input type="checkbox"/> |

7. Any other comments:

Organization:

.....

Full address:

.....

.....

Name of contact person:

Pour nous aider à améliorer le répertoire de fournisseurs, nous vous serions reconnaissants de bien vouloir remplir le questionnaire ci-dessous et de le retourner à l'ONUUDI, Service des négociations, P.O. Box 300, A-1400 Vienne, Autriche.

QUESTIONNAIRE

Répertoire des fournisseurs de produits chimiques à usage pharmaceutique et des produits intermédiaires

- | | OUI | NON |
|---|--------------------------|--------------------------|
| 1. Les renseignements contenus dans le répertoire vous ont-ils été utiles ? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Possédiez-vous déjà ces renseignements ? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Avez-vous rencontré des difficultés pour prendre contact avec les fournisseurs énumérés dans le répertoire ? Dans l'affirmative, veuillez donner des précisions. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Les renseignements contenus dans le répertoire ont-ils facilité vos achats et vous ont-ils permis de faire des économies ? Dans l'affirmative, veuillez donner des précisions. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Avez-vous des suggestions à présenter pour améliorer le répertoire ? Dans l'affirmative, veuillez les indiquer. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Etes-vous en contact avec d'autres fournisseurs que ceux qui sont énumérés dans le répertoire ? Dans l'affirmative, veuillez indiquer leur nom, leur adresse et le produit concerné. | <input type="checkbox"/> | <input type="checkbox"/> |

7. Autres observations :

Organisation :

Adresse complète :

S'adresser à :

Como cooperación a nuestro esfuerzo por hacer más útil la Guía de Fuentes de Abastecimiento, le agradeceríamos que rellenera el cuestionario que figura a continuación y lo devolviera a la ONUDI, Subdivisión de Negociaciones, P.O. Box 300, A-1400 Viena (Austria).

CUESTIONARIO

Guía de Fuentes de Abastecimiento de Productos Farmacéuticos y sus Productos Intermedios

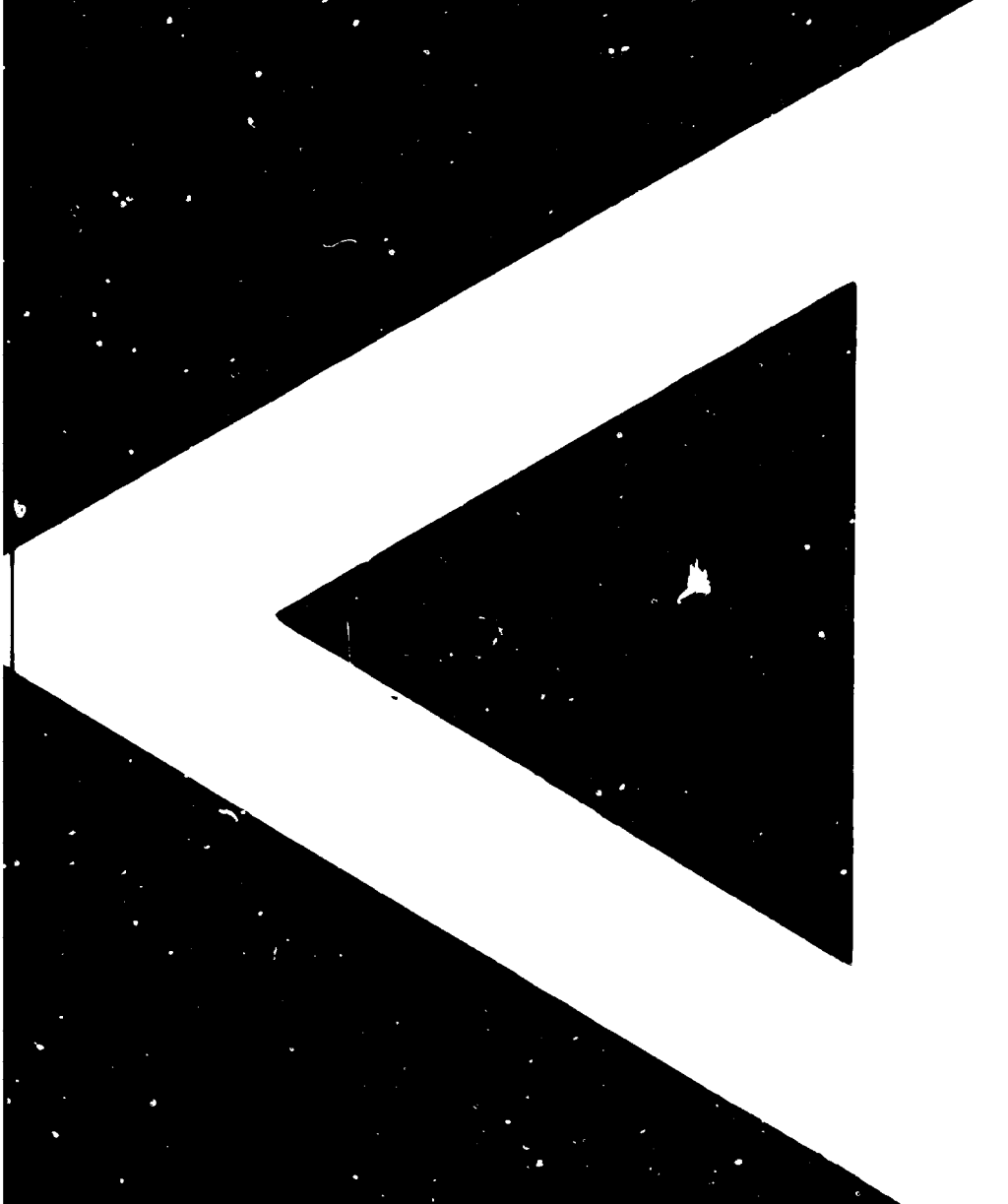
- | | SI | NO |
|--|--------------------------|--------------------------|
| 1. ¿Fue útil la información contenida en la Guía? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. ¿Fue nueva para usted la información suministrada? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. ¿Ha experimentado alguna dificultad para establecer contacto con los proveedores que se indican en la Guía? En caso afirmativo, le rogamos dar detalles | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. ¿Le ha sido de utilidad la información para facilitar las adquisiciones y reducir el costo de materiales y productos? En caso afirmativo, le rogamos dar detalles. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. ¿Puede hacer algunas sugerencias para mejorar la utilidad de la Guía? En caso afirmativo, le rogamos que las formule a continuación. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. ¿Tiene usted contactos con otras fuentes de abastecimiento que no se han incluido en la Guía? En caso afirmativo, le agradeceremos que nos indique su nombre, dirección y productos que fabrican. | <input type="checkbox"/> | <input type="checkbox"/> |

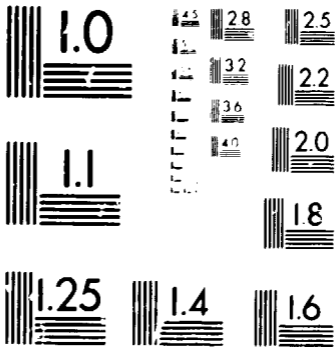
7. Otras observaciones:

Organización:

Dirección completa:

Nombre de la persona que sirve de contacto:





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)