Canadian Chemicals

For Export

SECOND EDITION

DECEMBER 1956

Canadian Chemicals For Export

Chemicals Division

Commodities Branch

Department of Trade and Commerce

Ottawa ☆ Canada

PREFACE

Because of the complexity of the chemical industry and the extremely technical nature of many of the products manufactured, the Chemicals Division of the Department of Trade and Commerce has endeavoured to present this publication for the benefit of the Trade Commissioners to assist in the development of trade promotional work. Furthermore this limited edition is being made available as a reference manual to firms abroad interested primarily in Canada as a source for chemicals and allied products.

This publication includes a short review of the growth of the chemical industry in Canada supported with a number of statistical tables that should prove useful for a better assessment of the role being played by this industry in the nation's economy. Also for purpose of easy reference, the main portion of this manual has been compiled in sections: one dealing with a variety of chemicals used in specific industries; another providing an alphabetical list of chemicals indicating properties, uses and the names of manufacturers; and finally a third listing the names and head offices of all the firms mentioned in this publication. These details should enable the Trade Commissioner or the importing firm to determine possible demands for chemicals based on a knowledge of the type of industries existing in the territory.

No attempt has been made to indicate all the chemicals and allied products made in Canada, but rather to concentrate only on those chemicals which are principally required for further processing or for use in the production of other chemical products. Furthermore as this publication is to assist in trade development, only those materials are included which manufacturers have indicated are available for export.

GROWTH OF THE CANADIAN CHEMICAL INDUSTRY

The chemical industry in Canada has passed another milestone when in 1954 for the first time total value of production of chemicals and allied products climbed past the billion dollar mark. From all indications, 1956 will show an additional increase in output while future prospects are considered so bright that the years to follow are almost certain to reflect further spectacular advances. The continuing rapid growth of this industry will serve only to strengthen and emphasize still further the growing importance of the chemical industry to Canada's national economy.

At the outset, the industry became established primarily to supply the requirements of a number of extractive industries and to take advantage of cheap hydroelectric power. Prior to 1890 the principal products being produced were probably only sulphuric acid, explosives and fertilizers. By 1914, however, the "electrochemical era" was ushered in and phosphorous, chlorates, calcium carbide, chlorine, and caustic soda were among the chief products added to the growing list of chemicals. During World War I, output of chemical products was stepped up substantially, although the principal new development covered chemicals such as acetone and acetic acid produced from calcium carbide through acetylene. Between the two wars, the most outstanding advance was the treatment of waste smelter gas for the production of sulphuric acid to be used to such a great extent in the production of chemical fertilizers. In addition further diversification took place with the addition of soda ash, sodium silicates, hydrogen peroxide, calcium chloride, phenol from coal tar, chlorinated organic solvents and paint driers. On top of this, substantial expansion also took place in the production of such established chemicals as chlorine, caustic soda and acids.

There is no question but that the second world conflict provided a tremendous impetus to the chemical industry. Still this increase was greatly influenced by the fact that Canadian industrial capacity in general was much further advanced than during World War I and thus considerably more receptive to demands made upon it. During this period of hostilities, chemical development included such new products as ammonium nitrate, phthalic anhydride, phenolic formaldehyde adhesives, nylon from imported flake, styrene and synthetic rubber, perchlorates, phosphorous sesquisulphide, nitro-guanidine, carbon disulphide, hexachlorethane, antibiotics and many other chemical products. Much of the increase in production during this period, of course, was to fill direct war requirements which later was to be turned to more stable peacetime uses.

Despite a brief peacetime adjustment in the immediate post-war period, the outbreak of hostilities in Korea, accompanied by world-wide shortages, again resulted in a further substantial expansion of chemical manufacturing facilities. This time special emphasis was placed on the production of petrochemicals such as formaldehyde, butanol, isobutanol, proponol, propylene glycol, pentaerythritol, and ethylene glycol, to name but a few. Other products not previously manufactured include polystyrene, polyethylene, polyesters, carbon black, liquid sulphur dioxide, fluorinated hydro-carbons (freon), lignosol, lubricant additives, and a wide variety of pharmaceutical products.

New chemical developments, together with increased expansion in existing plants to take place during 1956 and 1957, should add considerably to the value of chemical production in Canada over the next few years. These new developments will cover such products as tetra ethyl lead, titanium dioxide, xanthates, catalysts for petroleum refining, alkyl aryl compounds, methyl ethyl ketone, and pentachlorophenol, chemicals never before made in Canada. Furthermore these facilities are expected to reduce dependence on imports and quite possibly will eventually provide some surplus for export. Such old established products as ammonia, acids, petroleum products, synthetic resins, fertilizers, soda ash, caustic soda, chlorine, commercial explosives, and many other staple lines are also scheduled for substantial expansion in productive capacity.

The growth of the industry has now reached the stage where there were 1,112 plants operating in 1955. These operations, employing 51,463 persons, are concentrated mainly in the central provinces of Ontario and Quebec. Only 18% of these plants lie outside of these two provinces.

At this point it is important to outline exactly what manufacturing operations are included within the boundaries of the Chemical Industry. All countries do not necessarily adopt the same classification, however to clarify the statistical information supplied in this article the chemical industry is defined as comprising heavy chemicals; fertilizers; medicinals and pharmaceuticals; paints and varnishes; primary plastics; soaps; washing compounds and cleaning preparations; toilet preparations; vegetable oils; inks; adhesives; polishes and dressings; compressed gases; coal tar distillation; and miscellaneous chemical products such as explosives, hardwood distillation, insecticides, matches, dry colors, synthetic rubber, synthetic fibres, sulphur, etc.

Basically this industry can be broken down into two broad classifications - The Basic Chemical Industry and the Allied Chemical Products Industry. It is almost impossible to draw a definite and precise line between the two groups, however in general the Chemical Industry includes products manufactured by controlled processes involving molecular change while the Allied Industry includes products which have been mainly processed, that is compounded, mixed, repackaged, etc. In addition materials from the Basic Chemical Industry are sold mainly to other manufacturing firms whereas products of the Allied Industry are sold largely for direct consumption.

Of interest is the following table which will serve to indicate the growth in the chemical industry in Canada since 1925 as well as this country's expanding foreign trade in chemicals and allied products:

CANADIAN PRODUCTION & FOREIGN TRADE - CHEMICALS & ALLIED PRODUCTS

(millions of dollars)

Pre-War & War Period	1925	1930	1935	1940	1945
Gross National Product	4,937	5,546	4,345	6,872	11,850
Chemicals and Allied Prods.(1)					
Canadian Production	110	133	127	223	540
Exports (2)					
to U.K.	4	3	3	8	17
to U.S.	9	10	8	11	62
to All Countries	18	17	17	32	125
Imports (3)					
from U.K.	5	6	11	10	11
from U.S.	27	35	22	50	87
from All Countries	39	53	44	69	109
Domestic Supply	131	169	154	260	524

Post-War Period	1951	1952	1953	1954	1955
Gross National Product	21,474	23,255	24,449	24,041	26,624
Chemicals and Allied Prods.(1)					
Canadian Production	866	887	981	1,021	1,150
Exports (2)					
to U.K.	11	10	12	22	23
to U.S.	70	78	88	88	114
to All Countries	139	132	148	176	220
Imports (3)					
from U.K.	20	15	22	21	27
from U.S.	201	199	225	216	266
from All Countries	259	232	272	256	314
Domestic Supply	986	987	1,105	1,101	1,244

NOTES

(1) Includes production of Chemicals and Allied Products from outside that industry and commencing with 1940 synthetic fibres.

(2) Includes Trade of Canada Series - Chemicals & Allied Products, plus exports of vegetable oils, synthetic fibres and total re-exports.

(3) Includes Trade of Canada Series - Chemicals & Allied Products, plus imports of vegetable oils, synthetic rubber, synthetic fibres and sulphur.

Currently industry is expending considerable efforts to expand its exports and rapid strides have been made in this direction since the commencement of the Korean hostilities. To date a good deal of success has been attained largely due to high quality standards, efficiency in production, certain cost advantages, prevailing world shortages, and above all, to the efforts of industry to maintain as far as possible continuity of supply to all customers regardless of prevailing supply conditions.

For many years chemical fertilizers have played a very important role in Canada's external trade, and in 1955 sales abroad totalled $56.2 million, or one-fifth of all chemical exports, as against a total of $42.3 million in the previous year. Exports were principally as ammonium sulphate, ammonium nitrate, ammonium phosphates, calcium cyanamide, and a small quantity of mixed fertilizers. Seventy-eight per cent of these sales were made to the U.S.A., although other important markets were Korea, Greece, Hawaii, Philippine Islands, China, Colombia and other Latin American countries.

In Canada, as in many other countries, the primary plastic industry has enjoyed considerable expansion. From a modest output of approximately $2 million in 1940, the industry has blossomed to where total value of products in 1955 was estimated at more than twenty times this figure. As the Canadian demand increases, unquestionably many types and grades presently imported will eventually be made in this country. Despite the increase in productive capacity, output is confined to a few volume types such as cellulose acetate, phenolic resins, polystyrene, vinyl acetate, alkyd resins, polyvinyl chloride, nylon, polyethylene, urea formaldehyde and polyesters. At the present time, however, cellulose acetate and nylon are produced only in the textile grades.

In 1955, exclusive of the textile grades, exports of plastics in primary form amounted to $13.1 million, as against $11.2 million during the previous year. Exports were made to a wide variety of markets including the United Kingdom, France, Hong Kong, The Netherlands, Western Germany, Australia and a number of other European and Asiatic countries. Moderate shipments were also made to Latin America and to a few countries in Africa.

Another group to enjoy a considerable increase in export sales were cellulose products where shipments rose from $8.8 million in 1954 to $14.2 million in 1955. Eighty-five per cent of these products moved to Mexico, Colombia and Venezuela. On the other hand, moderate sales were also made to the British West Indies and to many countries in Europe and Latin America.

It is doubtful if there have been many segments of the Canadian chemical industry where progress has been more rapid in recent years than in the pharmaceutical industry. This increase in production, however, has not had a corresponding effect on sales to the extremely competitive world markets. In 1955 exports of certain selected items in this group were $4.3 million, a drop of $1.2 million from the previous year. These figures, nevertheless, do not reflect actual foreign sales as many drugs are statistically classified under a miscellaneous category.

A moderate increase in foreign sales has occurred in sodium compounds. Last year exports totalled $7.0 million, compared with $6.5 million in 1954.

Over 70% of these shipments moved to the United States, although other important markets are the Union of South Africa, Australia, Mexico, Philippines, Gold Coast and Rhodesia.

Apart from the products already covered, appreciable exports were also made in 1955 in such items as acids, alcohols, paint and paint products, calcium compounds, sodium sulphate, chlorine, cobalt oxides and salts, and toilet preparations and soap. A major portion of chemical exports are recorded statistically under a miscellaneous category and, therefore, a further breakdown of the more important classifications is not possible. In any case, included in these statistics are very substantial quantities of synthetic rubber and a wide range of drugs and petrochemicals.

No examination of the chemical industry in Canada is complete without giving some consideration to the new round of expansion presently underway. Investment plans for 1956 involve outlays two and one-half times the amount spent last year and are higher even than the peak of the preceding upsurge in 1952. The following table provides a comparison of the investment made in the chemical industry since 1946:

Investment in Chemicals & Allied Industry
(millions of dollars)

1946 - 27.3	1951 - 65.2
1947 - 42.4	1952 - 150.1
1948 - 50.3	1953 - 132.8
1949 - 46.3	1954 - 58.1
1950 - 32.4	1955 - 68.8
1956 - 155.5	

NOTE:
The figure for 1955 is preliminary, while for 1956 the figure represents the intentions of industry.

As regards the future, forecasting is a hazardous business at its best, however the growth potential of the chemical industry is great and barring unforeseen setbacks the long-term upward trend will not be interrupted for any length of time. Increasing population and rising standards of living will certainly continue to create an evergrowing demand which will raise many chemical requirements to the point where economic runs will be feasible. An indication of the possible magnitude of this future production and of Canada's trade abroad has already been expressed in some quarters by the prediction that by 1975 value of output may reach nearly $4 billion with exports as high as $600 million and imports $400 million.

PART I

INDUSTRIAL CLASSIFICATIONS AND CHEMICALS USED IN EACH INDUSTRY

INDUSTRIAL CLASSIFICATIONS

Adhesives Industry

Agricultural Industry

- Fertilizers
- Pesticides and Fungicides
- Stock and Poultry Feeds
- Veterinary Products

Chemical Industry

Disinfectants and Insecticides

Food Production and Processing: Beverage Industry

Inks Industry

Ore Dressing, Metal Refining and Processing.

Paint, Varnish and Lacquer Industry

Petroleum Refining: Oil and Grease Manufacture

Pharmaceutical and Medicinal Preparation Industry

Plastics Manufacture: Compounding and Processing

Polishes and Dressings Industry

Pulp and Paper Industry

Rubber Industry

Soap and Detergent Industry

Tanning and Leather Dressings Industry

Textile Manufacture and Finishing

Toilet Preparations and Cosmetics Industry

ADHESIVES INDUSTRY

Alkyl Phenol Polyglycol Ethers
Alkyl Sulphonates
Aluminum Sulphate
Carbon Tetrachloride
Cresol
Cresylic Acid
Dichloroethyl Ether
Dicyandiamide
Diethylene Glycol Ethers (Carbitol)
Ethylene Dichloride
Fatty Acids - Vegetable
Formaldehyde
Glycerine
Hydrochloric Acid
Isopropyl Alcohol
Lignosol, BD, ED and A
Linseed Oils
Metallic Soaps
Monochloroacetic Acid
Oleic Acid
Perchloroethylene
Phenol
Phosphoric Acid
Polyethylene Glycols (Cardowax)
Sodium Carboxymethylcellulose
Sodium Fluoride
Sodium Tripolyphosphate
Stearic Acid and Metallic Stearates
Sulphuric Acid
Trichloroethylene
Triethylene Glycol
Wheat Dextrines
Wheat Starches

Synthetic Resin Adhesives and Components

Alvar Polyvinyl Acetal Resins
Gelva Polyvinyl Acetate Resins
Melamine Resins
Monomeric Vinyl Acetate
Phenol Formaldehyde Resins
Polyvinyl Acetate Emulsions
Resorcinol Formaldehyde Resins
Urea Formaldehyde Resins

AGRICULTURAL INDUSTRY

Fertilizers

Ammonia, Anhydrous and Solution
Ammonium Nitrate
Ammonium Nitrate-Phosphate
Ammonium Phosphate
Ammonium Phosphate-Sulphate
Ammonium Sulphate
Calcium Cyanamide
Compound Fertilizers
Dicyandiamide
Lime
Magnesia
Phosphoric Acid
Superphosphate

Pesticides and Fungicides

Aldrin dusts, emulsions and wettable powders
Alkyl Aryl Sulphonates
Arsenic Trioxide
Brush Killers
Calcium Arsenate
Calcium Cyanide
Copper Oleate
Copper Sulphate
Cresol
Dieldrin Dusts and Wettable Powders
2-4 D Acid Esters and Salts
Endrin Dusts, emulsions and Wettable Powders
Fatty Acids - Vegetable
Formaldehyde
2-4, 5-T Formulations
Hydrated Lime
Iron Oxides (synthetic)
Isopropyl Alcohol
Lead Arsenate
Lignosols, BD, X, XD, TSD
Malathion Dusts, emulsions and Wettable Powders
Mercuric Oxide
Monochloroacetic Acid
Oleic Acid
Phosphorus, Yellow
Sodium Carboxymethylcellulose
Sodium Chlorate
Sodium Fluoride
Sodium Sulphate
Sulphur Dusting Powder
Thiram
Triethanolamine
Weed Killers

Stock and Poultry Feeds

Calcium Pantothenate
Choline Chloride Dry Mixture 25%
Cobalt Sulphate
Disodium Phosphate
Iron Oxides
Lecithin
Menadione Mixture (Vitamin K Feed Supplement)
Monocalcium Phosphate
Nicarbazin Mixture
Nicotinic Acid
Penicillin Procaine Feed Supplements
Potassium Iodide
Potassium Iodide-Calcium Stearate Mixture
Riboflavin and Mixtures
Streptomycin
Vitamin B 12 Feed Supplement
Vitamin B 12 and Antibiotic Feed Supplement
Vitamin D 2 and D 3
Vitamin B 4
Vitamin B 12
Sodium Propionate
Streptomycin
Sulfaquinoxaline

CHEMICAL INDUSTRY

Acetic Acid
Acetic Anhydride
Alkyl Aryl Sulphonates
Alkyl Phenol Polyglycol Esters
Alumina
Aluminum Fluoride
Aluminum Sulphate
Ammonia
Ammonium Nitrate
Ammonium Oxalate
Aniline
Barium Chloride
Bentonite
Butyl Alcohol
Calcium Carbide
Calcium Carbonate
Calcium Cyanamide
Carbon Tetrachloride
Caustic Soda
Chemicals for Explosives, Pyrotechnics and Matches
Chlorine
Chloroform
Citric Acid
Cresol
Diatomaceous Earth
Dichloroethyl Ether
Dicyandiamide
Diethanolamine
Diethylene Glycol Ethers (Carbitol)
Diphenylamine
Ethyl Acetate
Ethyl Alcohol
Ethyl Hexanol
Formaldehyde
Glycerine
Hydrochloric Acid
Isopropyl Alcohol
Lime
Linseed Oil
Methanol
Monochloroacetic Acid
Nitric Acid
Nitrobenzene
Oleic Acid
Pentaerythritol
Phenol
Phosphoric Acid
Phosphorus, Red (Matches & Pyrotechnics)
Phosphorus, Yellow
Phosphorus Sesquisulphide (Matches and Pyrotechnics)
Phthalic Anhydride
Platinic Chloride
Potassium Acid Phthalate
Potassium Bichromate
Potassium Chlorate
Potassium Chromate
Sodium Bichromate
Sodium Carboxymethylcellulose
Sodium Chloride
Sodium Chromate
Sodium Phosphate
Stearic Acid
Sulphuric Acid
Xylenol

DISINFECTANTS AND INSECTICIDES

Acetaldehyde
Acetic Acid
Aldrin Dusts, Emulsions and Wettable Powders
Alkyl Aryl Sulphonates
Alkyl Phenol Polyglycol Ethers
Aniline

Calcium Arsenate
Carbon Tetrachloride
Caustic Soda
Chlorine
Copper Oleate
Copper Sulphate
Cresol
Cresylic Acid
Dieldrin Dusts and Wettable Powders
Endrin Dusts, Emulsions and Wettable Powders
Ethyl Alcohol
Ethylene Dichloride
Ethylene Oxide
Fatty Acids - Vegetable
Ferric Chloride
Formaldehyde (37% Solution)
Hydrated Lime
Hydrogen Peroxide
Iodoform
Iron Oxides (synthetic)
Isobutyl Alcohol
Isopropyl Alcohol
Lead Arsenate
Litharge
Malathion Dusts, Emulsions and Wettable Powders
Mercuric Chloride
Mercuric Iodide
Mercuric Oxide
Methanol
Oleic Acid
Polyethylene Glycols (Carbowax)
Propylene Glycol
Silver Nitrate
Sodium Fluoride
Sulphonated Fatty Alcohol
Thiram
Trichloroethylene
Xylenol

FOOD PRODUCTION AND PROCESSING: BEVERAGE INDUSTRY

Acetic Acid
Aluminum Sulphate
Ammonia
Ascorbic Acid
Benzoic Acid
Butyl Alcohol
Caffeine
Caustic Soda
Chlorine
Citric Acid
Diethylene Glycol
Disodium Phosphate
Ethyl Alcohol
Ethylene Oxide
Formaldehyde
Glycerine
Hydrochloric Acid
Isopropyl Alcohol
Lecithin
Monocalcium Phosphate
Monochloroacetic Acid
Monosodium Glutamate
Monosodium Phosphate
Nicotinic Acid
Phosphoric Acid
Potassium Iodide
Rennin
Riboflavin
Soda Ash
Sodium Ascorbate
Sodium Benzoate
Sodium Carboxymethylcellulose
Sodium Chloride
Sodium Citrate
Sodium Hydroxide
Sodium Hypochlorite
Sodium Propionate
Sodium Pyrophosphate
Soya Bean Oil
Sulphur Dioxide
Tetrasodium Phosphate
Thiamin Hydrochloride
Thiamin Nitrate
Trisodium Phosphate
Vitamin Mixtures for enrichment of flour

INKS INDUSTRY

Colours

Acetylene Black
Benzidine Yellow
Chlorinated Para Red
Chrome Yellow, Orange and Green
Gold Bronze Powders
Hansa Yellow
Iron Oxides (Synthetic)
Lithol Reds
Milori and Chinese Blue
Molybdate Orange
Naphthol Red

Para Red
Red Lake C

Other Constituents

Acetic Acid
Aluminum Stearate
Ammonium Stearate
Calcium Acetate
Calcium Stearate
Citric Acid
Cobalt Acetate
Cobalt Oxide
Cobalt Sulphate
Cresol
Cresylic Acid
Cyclohexanol
Diethylene Glycol Ethers (Carbitol)
Diethylene Glycol
Dimethylcyclohexyl Phthalate
Ethyl Acetate
Ethyl Alcohol
Ethylene Glycol
Fatty Acids - Vegetable
Gelva Polyvinyl Acetate Resins
Glycerine
Lecithin, Commercial
Linseed Oil
Methylcyclohexanol
Monocalcium Phosphate
Naphthenates
Oleic Acid
Phthalic Anhydride
Polyethylene Glycols (Carbowax)
Potassium Chlorate
Propylene Glycol
Shellac, Bleached and Orange
Stearic Acid
Triethylene Glycol
Zinc Stearate

ORE DRESSING, METAL REFINING AND PROCESSING

Processing Chemicals

Acid Sodium Pyrophosphate
Aluminum Chloride
Aluminum Fluoride
Aluminum Hydrate
Ammonia
Bauxite
Calcium Cyanide
Calcium Cyanamide
Caustic Soda
Chlorine
Cresol
Ferrophosphorus
Fluospar
Hydrated Lime
Hydrochloric Acid
Lignosol BD, B, SF
Magnesia
Magnesium Chloride (Anhydrous)
Monosodium Phosphate
Nitric Acid
Phosphoric Acid
Potassium Chlorate
Red and Yellow Phosphorus
Sodium Chlorate
Sodium Fluoride
Sodium Pyrophosphate
Sodium Tripolyphosphate
Stearic Acid (Flotation)
Sulphuric Acid
Tetrasodium Phosphate
Trisodium Phosphate

Solvents (Mainly for degreasing)

Carbon Tetrachloride
Perchloroethylene
Trichloroethylene

Electroplating Chemicals

Cobalt Chloride
Gold Cyanide
Gold Potassium Cyanide
Gold Sodium Cyanide
Silver Cyanide
Silver Nitrate

Miscellaneous Uses

Alkyl Aryl Sulphonates
Alkyl Phenol Polyglycol Ethers
Ammonium Chloride
Calcium Carbide
Cresol
Fatty Acids - Vegetable
Oleic Acid
Propylene Glycol
Soldering and Tinning Fluxes
Triethanolamine
Zinc Ammonium Chloride
Zinc Chloride

PAINT - VARNISH AND LACQUER INDUSTRY

Pigments and Colours

Acetylene Black
Aluminum Powder
Aluminum Stearate
Barytes
Basic White Lead, Carbonate
Basic White Lead, Sulphate
Carbon Black
Chrome Yellows, Oranges, Greens
Cobalt Carbonate
Cobalt Nitrate
Iron Oxides (Synthetic)
Litharge
Lithol Reds
Mercuric Oxide, Yellow & Red
Milori and Chinese Blue
Molybdate Orange
Naphthalene Formaldehyde Sulphonic Acid (for pigment manufacture)
Para and Toluidine Reds
Potassium Chlorate
Red Lead
Scarlet Lake
Sodium Chlorate
Zinc Oxide
Zinc Yellow

Solvents and Oils

Acetone
Blown Fish Oil
Butyl Acetate
Butyl Alcohol
Castor Oil, Blown and Dehydrated
Cyclohexanol
Dichloroethyl Ether
Diethylene Glycol
Ethyl Alcohol
Ethylene Dichloride
Isobutyl Alcohol
Isopropyl Alcohol
Linseed Oil, Raw, Boiled, Blown and Processed
Methanol (Methyl Alcohol)
Methyl Ethyl Ketone
Mineral Spirits
n-Propyl Acetate
n-Propyl Alcohol
Soya Bean Oil
Special Solvents (Alcohol and Ketone Type)

Miscellaneous Products

Alkyl Aryl Sulphonates
Alkyl Phenol
Aluminum Stearate
Ammonium Distearate
Ammonium Tristearate
Aniline
Arsenic Trioxide
Calcium Stearate
Caustic Soda
Citric Acid
Copper Naphthenate
Cresol
Cresylic Acid
Dibutyl Phthalate
Dicyclohexyl Phthalate
Diethylene Glycol Ethers (Carbitol)
Dimethylcyclohexyl Phthalate
Disodium Phosphate
Ethyl Acetate
Fatty Acids - Vegetable
Melamine & Urea Industrial Resins
Metallic Naphthenates
Methyl Acetone
Methylcyclohexanol
Pentaerythritol
Phosphoric Acid
Phthalic Anhydride
Sodium Carboxymethylcellulose
Sodium Chlorate
Trisodium Phosphate
Zinc Naphthenate
Zinc Stearate

PETROLEUM REFINING AND OIL AND GREASE MANUFACTURE

Acetone
Activated Alumina
Alkyl Aryl Sulphonates
Alkyl Phenol Polyglycol Ethers
Aluminum Chloride
Aluminum Sulphate
Ammonia
Carbon Tetrachloride
Castor Oil, Blown
Caustic Soda
Chlorine
Cresol
Diethanolamine
Dioctyl Adipate
Dioctyl Azelate

Fatty Acids - Vegetable
Fatty Acid Polyglycol Esters
Hydrated Lime
Hydrochloric Acid
Isopropyl Alcohol
Lard Oil
Lecithin
Linseed Oils
Litharge
Metal Stearates
Monoethanolamine
Monosodium Phosphate
Neatsfoot Oil
Oleic Acid
Phenol
Phosphoric Acid
Sodium Hexametaphosphate (oil drilling muds)
Sodium Pyrophosphate (oil drilling muds)
Soya Bean Oil
Stearic Acid
Sulphuric Acid
Tetrasodium Phosphate

PHARMACEUTICAL AND MEDICINAL INDUSTRY

Acetaldehyde
Acetic Acid
Acetic Anhydride
Acetone C.P.
Acetyl Sulfanilamide
A.C.T.H.
Activated Alumina
Aloin
Aluminum Chloride
Ammonia
Amphetamine Salts
Aniline
Arsenic Trioxide
Ascorbic Acid
Benzoic Acid
Bismuth Glycol Arsanilate
Bismuth Salts
Butyl Alcohol
Cadmium Sulphate
Caffeine, Caffeine Salts
Calamine
Calcium Pantothenate
Calomel
Carbon Tetrachloride
Cascara Extracts
Casein Hydrolysates
Chlorine
Chloroform
Cholesterol
Cholic Acid
Citric Acid
Cupric Citrate
Dehydrocholic Acid
Dibutyl Phthalate
Dicyandiamide
Diethylene Glycol Ethers (Carbitol)
Dihydroxyaluminum Aminoacetate
Disodium Phosphate
Ethyl Acetate
Ethyl Alcohol
Fatty Acids - Vegetable
Fatty Acid Polyglycol Esters
Formaldehyde
Glandular Extracts
Glycerine
Guanidine
Lecithin
Lindocaine
Liver Extracts
Magnesium Stearate
Medicinal Plant Extracts
Mercuric Iodide
Mercuric Oxide
Mercury
Metal Stearates
Methyl Alcohol
Monocalcium Phosphate
Monoethanolamine
Monomeric Vinyl Acetate
Oleic Acid
Ox Gall Extracts
Pancreatin
Parathyroid Powder
Penicillin
Pepsin
Perchloroethylene
Phenacetin
Phenol
Phosphoric Acid
Phosphoric Anhydride
Phthalic Anhydride
Platinic Chloride
Polyethylene Glycols (Carbowax)
Potassium Chlorate
Potassium Citrate
Potassium Iodide
Potassium Oxalate
Powdered Glandular Extracts
Propyl Acetate
Propyl Alcohol

Quassin
Quercetin
Reserpine
Riboflavin
Rutin
Silver Nitrate
Sodium Ascorbate
Sodium Benzoate
Sodium Carboxymethylcellulose
Sodium Chlorate
Sodium Citrate
Sodium Iodide
Sodium Sulfamethazine
Stearic Acid
Streptomycin
Sulfa Drugs
Sulfaguanidine
Sulfamethazine
Sulfathiazole
Sulphacetamide Salts
Theophylline Derivatives
Thiamine Hydrochloride
Thiamine Mononitrate
Thymol Iodide
Trichloroethylene
Triethanolamine
Trisodium Phosphate
Vitamin B 4
Vitamin B 12
Vitamin D 2
Vitamin D 3
Zinc Oxide
Zinc Stearate

PLASTICS MANUFACTURE, COMPOUNDING AND PROCESSING INDUSTRY

Resins

Melamine and Urea Resins
Phenolic Resins (liquid)
Polyester Resins
Polystyrene
Polyvinyl Acetal Resin
Polyvinyl Acetate Resins
Polyvinyl Chloride Resins
Polyvinyl Chloride-Acetate Resins

Resins Compounds, Films, Sheeting

Polystyrene Moulding Powders
Polyvinyl Chloride Films - plain, printed, or embossed
Polyvinyl Chloride Sheeting
Polyvinyl Chloride Extrusion and Moulding Compounds

Plasticising and Compounding Chemicals - Raw Materials

Acetic Anhydride
Acetylene Black
Aluminum Stearate
Butyl Alcohol
Calcium Stearate
Caustic Soda
Citric Acid
Cresol
Cresylic Acid
Dicyclohexyl Phthalate
Dimethylcyclohexyl Phthalate
Dioctyl Adipate
Dioctyl Azelate
Dioctyl Phthalate
2- Ethyl Hexanol (for dioctyl phthalate)
Fatty Acids - Vegetable
Fatty Acid Esters
Formaldehyde
Glycerine
Iron Oxides (Synthetic)
Lead Stearate
Linseed Oils
Metallic Stearates
Pentaerythritol
Phenol
Phthalic Anhydride
Stearic Acid
Soya Bean Oils
Xylenol
Zinc Stearate

Solvents

Acetic Acid
Acetone
Cyclohexanol
Ethyl Alcohol
Ethylene Glycol
Isobutyl Alcohol
Methanol
Methylcyclohexanol
n-Propyl Acetate
n-Propyl Alcohol
Propylene Glycol

POLISHES AND DRESSINGS INDUSTRY

Carbon Tetrachloride
Cyclohexanol
Diethanolamine
Diethylene Glycol Ethers (Carbitol)
Fatty Acids
Glycerine
Iron Oxides (Synthetic)
Isopropyl
Lecithin
Methylcyclohexanol
Monoethanolamine
Oleic Acid
Polyethylene Glycols (Carbowax)
Trichloroethylene
Triethanolamine

PULP AND PAPER INDUSTRY

Alkyl Aryl Sulphonates
Aluminum Hydrate
Aluminum Sulphate
Ammonia
Caustic Soda
Chlorine
Dibutyl Phthalate
Dicyandiamide
Disodium Phosphate
Hydrated Lime
Hydrochloric Acid
Hydrogen Peroxide
Iron Oxides (Synthetic)
Propylene Glycol
Slimicide
Sodium Carboxymethylcellulose
Sodium Chlorate (for Bleaching)
Sodium Hexametaphosphate
Sodium Pyrophosphate
Sodium Sulphite
Sodium Tripolyphosphate
Sulphur Dioxide (Liquid)
Tetrasodium Phosphate
Triethylene Glycol
Trisodium Phosphate
Quick Lime

RUBBER INDUSTRY

Accelerators
Acetaldehyde
Acetic Acid
Acetone
Acetylene Black
Activators
Alumina
Aluminum Chloride
Aluminum Stearate
Antioxidants
Carbon Black
Carbon Tetrachloride
Caustic Soda
Chlorine
Ethyl Alcohol
Formaldehyde
Hydrated Lime
Hydrochloric Acid
Inhibitors
Iron Oxides (Synthetic)
Lignosol, TSD
Methanol
Oleic Acid
Phthalic Anhydride
Polyethylene Glycols (Carbowax)
Retarders
Stearic Acid
Sulphuric Acid
Synthetic Rubbers (Polysars)
Trichloroethylene
Zinc Oxide
Zinc Stearate

SOAP AND DETERGENT INDUSTRY

Alkyl Aryl Sulphonates
Alkyl Phenol Polyglycol Ethers
Alumina Hydrate
Ammonia, Aqua
Caustic Soda
Chlorine
Cocoanut Fatty Acids
Cresol and Cresylic Acid
Cyclohexanol
Diethanolamine
Diethylene Glycol
Diethylene Glycol Ethers (Carbitol)
Disodium Phosphate
Ethyl Alcohol
Ethylene Dichloride
Ethylene Oxide
Ferric Chloride
Hydrochloric Acid
Lauric Diethanolamides
Lignosol, BD, XD
Linseed Oil

Methanol
Methylcyclohexanol
Monoethanolamine
Oleic Acid
Phenol
Sodium Carboxymethylcellulose
Sodium Chloride
Sodium Hexametaphosphate
Sodium Tripolyphosphate
Stearic Acid
Sulphuric Acid
Tetrasodium Phosphate
Trichloroethylene
Triethanolamine
Trisodium Phosphate
Washing Soda Crystals

TANNING AND LEATHER DRESSING INDUSTRY

Acetic Acid
Acetone
Alcohol
Alkyl Aryl Sulphonates
Alkyl Phenol Polyglycol Ethers
Aluminum Sulphate
Ammonia, Aqua
Ammonium Chloride
Blown Fish Oil
Butyl Acetate
(for Artificial Leathers)
Butyl Alcohol
(for Artificial Leathers)
Calcium Acetate
Citric Acid
Diethanolamine
Diethylene Glycol Ethers (Carbitol)
Ethyl Acetate
Ethyl Alcohol
Fatty Acids - Vegetable
Formaldehyde
Glycerine
Hydrated Lime
Hydrochloric Acid
Hydrogen Peroxide
Iron Oxides (Synthetic)
Isopropyl Alcohol
Lard Oil
Lauric Diethanolamides
Lecithin, Commercial
Lignosol, XD and TSD
Linseed Oils
Monoethanolamine
Naphthalene Formaldehyde Sulphonic Acid
Neatsfoot Oil
Oleic Acid
Phosphoric Acid
Quick Lime
Sodium Carboxymethylcellulose
Sodium Chloride
Sodium Chromate
Sodium Citrate
Sodium Hydroxide
Sodium Hyposulphite
Sodium Tripolyphosphate
Stearic Acid
Sulphated Fatty Alcohols
Sulphonated Castor Oil
Sulphonated Fish Oil
Sulphuric Acid
Tetrasodium Phosphate
Triethanolamine
Trisodium Phosphate

TEXTILE MANUFACTURE AND FINISHING

Acetic Acid
Acetic Anhydride
Acetone
Alkyl Aryl Sulphonates
Alkyl Polyglycol Ethers
Aluminum Chloride
Ammonia, Aqua
Ammonium Tartrate
Calcium Acetate
Carbon Tetrachloride
Caustic Soda
Chlorine
Copper Naphthenate
Cresol
Cyclohexanol
Dichloroethyl Ether
Dicyandiamide
Diethanolamine
Diethylene Glycol Ethers (Carbitol)
Disodium Phosphate
Ethyl Acetate
Ethyl Alcohol
Ethylene Dichloride
Fatty Acids - Vegetable
Fatty Acid Polyglycol Esters
Formaldehyde
Glycerine
Hydrochloric Acid
Hydrogen Peroxide

Isopropyl Alcohol
Lard Oil
Lauric Diethanolamides
Methylcyclohexanol
Monochloroacetic Acid
Monoethanolamine
Naphthalene Formaldehyde Sulphonic Acid
Neatsfoot Oil
n-Propyl Acetate
n-Propyl Alcohol
Oleic Acid
Pancreatin
Perchloroethylene
Phosphoric Acid
Polyethylene Glycols
Polyvinyl Acetate Emulsion
Polyvinyl Acetate Resins
Potassium Chlorate
Potassium Oxalate
Propylene Glycol
Sodium Carboxymethylcellulose
Sodium Chlorate
Sodium Sulphite
Sodium Tripolyphosphate
Stearic Acid
Sulphated Fatty Alcohols
Sulphonated Castor Oil
Sulphonated Neatsfoot Oil
Tetrasodium Phosphate
Trichloroethylene
Triethanolamine
Trisodium Phosphate
Zinc Naphthenate
Zinc Oxide

TOILET PREPARATIONS AND COSMETICS

Acetic Acid
Acetone
Aluminum Hydroxide
Aluminum Stearate
Aluminum Sulphate
Ammonia, Aqua
Butyl Acetate
Butyl Alcohol
Carbon Tetrachloride
Citric Acid
Cocoanut Fatty Acids
Dibutyl Phthalate
Diethanolamine
Diethylene Glycol Ethers (Carbitol)
Ethyl Acetate
Ethyl Alcohol
Fatty Acids - Vegetable
Fatty Acid Esters
Fatty Acid Polyglycol Esters
Glycerine
Hydrogen Peroxide
Isopropyl Alcohol
Lauric Diethanolamides
Lecithin, Commercial
Magnesium Stearate
Methanol
Monoethanolamine
Oleic Acid
Palmitic Acid
Perchloroethylene
Phenol
Phosphoric Acid
Polyethylene Glycols (Carbowax)
Potassium Chlorate
Propyl Acetate
Propyl Alcohol
Sodium Carboxymethylcellulose
Sodium Chlorate
Sodium Stearate
Stearic Acid
Tetrasodium Phosphate
Triethanolamine
Trisodium Phosphate
Zinc Stearate

PART II

CHEMICALS MADE IN CANADA

THEIR PROPERTIES AND USES

ACETALDEHYDE

Colourless, flammable liquid with a pungent, suffocating odour. Miscible with water, alcohol, acetone, solvent naphtha and most other common solvents.

Containers: steel drums.

Uses: Raw material for the manufacture of many other organic chemicals and dyes; denaturant for ethyl alcohol; preservative for fruits, fish and leather; hardening gelatine, glue and casein products.

Manufacturers:

Canadian Chemical Company Limited.
Shawinigan Chemicals Limited.

ACETIC ACID

Clear, colourless liquid, with pungent smell. Obtainable in several grades, e.g. Pharmacopeia, U.S.P., B.P.; Glacial; Technical; also in solution in water in various strengths.

Containers: bottles, carboys, aluminum drums, and tank cars.

Chief Uses: Manufacture of acetic anhydride and esters of acetic acid; dyes; intermediates; cellulose acetate; lead whites; textile processing; coagulating rubber latex; cellulose acetate films; leather tanning; pharmaceutical industry; chemical industry.

Manufacturers:

Canadian Chemical Company Limited.
Shawinigan Chemicals Limited.

ACETIC ANHYDRIDE

Colourless, mobile liquid with a very pungent acetic odour. Soluble in alcohol, chloroform and ether. Reacts with water, forming acetic acid.

Containers: demijohns and aluminum drums.

Uses: Manufacture of cellulose acetate; in the dye industry; preparation of pharmaceuticals; powerful acetylating agent; solvent for organic reactions.

Manufacturers:

Canadian Chemical Company Limited.
Shawinigan Chemicals Limited.

ACETONE

Colourless, stable liquid with a pleasant mint like odour; volatile; inflammable.

Containers: cans, drums, and tank cars.

Chief Uses: Solvent in smokeless powder and cordite; in the paint industry; as a low boiling solvent in the manufacture of acetate and nitro cellulose lacquers and for lacquer thinners; artificial leather manufacture; solvent for acetylene gas storage and transport; raw material for certain organic chemical manufacture; solvent in dewaxing lubricating oils; for extraction of essential oils, fats, vegetable oils and resins; nail polish remover; safety glass; and photographic films.

Manufacturers:

B.A. - Shawinigan Limited.
Canadian Chemical Company Limited.
Shell Oil Co. of Canada Ltd.

ACETYLENE BLACK

A very pure form of finely divided carbon, manufactured by the thermal

decomposition of acetylene. Special applications are due to its high liquid absorption, its retention of high bulk volume, high degree of purity, its high electrical conductivity and its property of rendering rubbers, plastics and other material conductive, when added.

Containers: compressed in paper bags, packed in plywood cases.

Uses: In manufacture of dry cell batteries; filler in natural and synthetic rubbers; specialized use in manufacture of conductive rubbers and plastics; gloss suppressor in the paint industry; pigment in special printing inks.

Manufacturer:

Shawinigan Chemicals Limited.

ACID SODIUM PYROPHOSPHATE

See under Sodium Phosphates.

A C T H (Adrenocorticotropic Hormone)

Hormone of the pituitary gland. White powder, freely soluble in water.

Uses: Medicinal and Veterinary.

Manufacturer:

Canada Packers Limited.
(Fine Chemicals Dept.)

ACTIVATED ALUMINA

Highly porous and granular form of aluminum oxide having considerable absorptive capacity for moisture from gases, vapours and some liquids.

Uses: Drying of gases and vapours; drying furnace atmosphere; in the treatment of metallic parts; maintaining uniform humidity in enclosures; as a catalyst or catalyst carrier.

Manufacturer:

Aluminum Company of Canada Limited.

ALDRIN FORMULATIONS

Common name for an insecticide containing as its active principle 1,2,3,4,10,10 Hexachloro - 1,4,4a,5,8,8a Hexahydro - 1,4,5,8, - dimethanonaphthalene.

Forms: Dusts, emulsifiable concentrate and wettable powders.

Uses: Against insects affecting field, root and garden crops, including soil insects.

Manufacturer:

Chipman Chemicals Limited.

ALKYD RESINS

Resin-like substances made by the reaction of polybasic acids with polyhydric alcohols, e.g. phthalic anhydride and glycerine. Sold in the solid form or in solution. Widely used in the manufacture of paints and varnishes.

Uses: In automobile finishes; electrical insulation; emulsion paints; floor coverings; interior and exterior enamels; household and industrial paints and lacquers; printing inks; water paints.

Manufacturers:

Canadian General Electric Company Ltd.
Reichhold Chemicals (Canada) Ltd.
Schenectady Varnish Canada Ltd.
Woburn Chemicals Ltd.

ALKYL ARYL SULPHONATES

Wetting agents and detergents in paste and powder form.

Uses: In insecticides, fungicides and disinfectants; soaps and detergent compositions; finishing of cotton, rayon and woollen textiles; toilet preparations and cosmetics; glues and adhesives; tanning and leather dressing; chemical processing.

Manufacturers:

Canadian Aniline & Extract Co. Ltd.
Chemical Developments of Canada Ltd.

ALKYL PHENOL POLYGLYCOL ETHERS

A series of wetting agents and detergents.

Uses: Glues and adhesives; insecticides, herbicides and pesticides; disinfectants; metal refining and processing; paints; petroleum products; pulp and paper; tanning and leather dressing; textile processing; washing compounds and detergents; chemical processing.

Manufacturer:

Chemical Developments of Canada Ltd.

ALOIN

Lemon-yellow to brown crystalline powder derived by extraction from aloes.

Uses: For use of laboratories manufacturing laxative tablets.

Manufacturer:

Fine Chemicals of Canada Limited.

"ALPASTE"

Aluminum powder in suspension in a liquid vehicle.

Uses: In inks; paints, varnishes and lacquers; in the production of aerated concrete.

Manufacturers:

Aluminum Company of Canada Limited.
Canadian Bronze Powder Works Ltd.

ALUMINUM HYDRATE (Aluminum Hydroxide)

White unctuous material.

Containers: bottles, kegs and barrels.

Uses: Soaps and detergents; pulp and paper manufacture; metal refining and processing; glass; ceramics; manufacture of aluminum salts.

Manufacturer:

Aluminum Company of Canada Limited.

ALUMINUM OXIDE (ALUMINA) CALCINED

White powder, crushed and sized lumps.

Containers: cans, bags and barrels.

Uses: In polishes and dressings; abrasives; glass; enamel manufacture; refractories; in metal refining and processing of other chemicals.

Manufacturer:

Aluminum Company of Canada Limited.

ALUMINUM POWDER

Finely-divided aluminum metal, atomized and flake, in various mesh sizes.

Uses: Basic pigment in aluminum paints; metal refining and processing; in explosives; compounding synthetic resins; silicosis treatment; for burns; processing other chemicals.

Manufacturers:

Aluminum Company of Canada Limited.
Canadian Bronze Powder Works Ltd.

ALUMINUM STEARATE

Fine white or slightly yellow-white powder, insoluble in water. Soluble or dispersible in a wide variety of organic media as mineral spirits and naphtha, kerosene, gasoline, esters, alcohols, ketones.

Uses: Waterproofing; ingredient of petroleum greases; in some paints.

Manufacturers:

H.L. Blachford Limited.
Mallinckrodt Chemical Works Limited.

ALUMINUM SULPHATE (Alum, Paper Makers Alum)

A white solid, powdered or crystalline. Soluble in water.

Containers: bottles, bags, kegs and barrels.

Uses: Sizing paper; mordant in dyeing; water purification; sewage treatment; manufacture of lakes and alums; aluminum salts; printing inks; lubricants; boiler compounds; pharmaceuticals; oil cloth and linoleum; ceramics; fillering medium; in gypsum wall plaster and wall board.

Manufacturers:

Aluminum Company of Canada Limited.
Nichols Chemical Company Limited.

AMMONIA ANHYDROUS

Ammonia is normally a gas which is liquified under pressure at ordinary temperatures.

Containers: cylinders and tank cars.

Uses: Refrigerant, apart from large scale use in chemical manufacture of nitric acid and other industrial chemicals; in petroleum refining; sulphite pulp manufacture; leaching of ores; fertilizer.

Manufacturers:

Canadian Industries Limited.
Consolidated Mining & Smelting Co. of Canada Ltd.
Dow Chemical of Canada Limited.
North American Cyanamid Limited.
Sherritt Gordon Mines Limited.

AMMONIA AQUA (Ammonia Water, Ammonium Hydrate, Ammonium Hydroxide)

Colourless solution of ammonia gas in water.

Containers: bottles, carboys and drums.

Uses: Chemical manufacture; synthetic drugs and pharmaceuticals; washing compounds; ammonia soaps; ammonium salts; inks; glues and adhesives; smelling salts; textile dyeing; electrotyping and photo engraving; petroleum refining; in many applications where an alkaline reagent is necessary.

Manufacturers:

Canadian Industries Limited.
Consolidated Mining & Smelting Co. of Canada Ltd.
Dow Chemical of Canada Limited.
Nichols Chemical Company Limited.

AMMONIUM CHLORIDE (Sal Ammoniac)

White to greyish lumps, crystals or powder.

Grades: U.S.P.; B.P.; Reagent; C.P.; Technical.

Uses: Ammonia salts; synthetic drugs and medicines; candles; washing powders; as an electrolyte in batteries and cells; soldering and galvanizing flux; mordant in dyeing and printing.

Manufacturers:

Canadian Industries Limited.
Merck & Company Limited.

AMMONIUM NITRATE

Colourless or white crystalline or granular powder. Soluble in water, alcohol and alkali solutions. 33½% Nitrogen content. Also in solution (24% Nitrogen).

Grades: C.P.; Technical; Cryst.; Granular.

Containers: kegs, drums, barrels and bags.

Uses: Manufacture of nitrous oxide (minor); explosive mixture; largest use as fertilizer.

Manufacturers:

Consolidated Mining & Smelting Co. of Canada Ltd.
North American Cyanamid Limited.
Northwest Nitro-Chemicals Limited.

AMMONIUM NITRATE PHOSPHATE (27-14-0)

Mixture of ammonium nitrate and phosphate. White to grey crystalline material.

Use: Fertilizer.

Manufacturers:

Consolidated Mining & Smelting Co. of Canada Ltd.
Northwest Nitro-Chemicals Limited.

AMMONIUM OXALATE

Colourless crystalline material.

Uses: Processing other chemicals; safety explosives; laboratory reagent.

Manufacturer:

Anachemia Chemicals Limited.

AMMONIUM PHOSPHATE (11-48-0)

White crystalline or powdered material. Soluble in water.

Uses: Mainly as fertilizer; also in fireproofing textiles and wood; in medicine.

Manufacturers:

Consolidated Mining & Smelting Co. of Canada Ltd.
Northwest Nitro-Chemicals Limited.

AMMONIUM PHOSPHATE SULPHATE (16-20-0)

Mixture of ammonium phosphate and ammonium sulphate. White to grey crystalline material.

Use: Fertilizer.

Manufacturers:

Consolidated Mining & Smelting Co. of Canada Ltd.
Northwest Nitro-Chemicals Limited.

AMMONIUM SULPHATE

Grey to white crystalline material or fine powder. 21% nitrogen content.

Containers: barrels, bags and kegs.

Uses: Main use as fertilizer; minor uses soldering and galvanizing, electric batteries, candle manufacture, fireproofing compositions.

Manufacturers:

Algoma Steel Corporation Limited.
Consolidated Mining & Smelting Co. of Canada Ltd.
Dominion Steel & Coal Corporation Ltd.
Hamilton By-Product Coke Ovens Ltd.
Merck & Co. Ltd. (Reagent grade only).
Montreal Coke & Manufacturing Company).
Sherritt Gordon Mines Limited.
Steel Company of Canada Limited.

AMMONIUM TARTRATE

Colourless crystalline material.

Uses: In textile chemicals; laboratory chemical.

Manufacturer:

Anachemia Chemicals Limited.

AMPHETAMINE SULPHATE AND PHOSPHATE

Crystalline compound used by laboratories manufacturing reducing tablets and tonics.

Manufacturer:

Fine Chemicals of Canada Limited.

AMYL ACETATE (Banana Oil, Isoamyl Acetate)

Colourless liquid, banana or pear odour.

Uses: Fruit flavours; soft drinks; food preparations; confectionery; artificial leather; lacquers; bronzing liquids; celluloid; solvent in making nitrocellulose; solvent for camphor; dyeing, printing and finishing textile fabrics.

Manufacturer:

Cosmos Chemical Company.

ANILINE (Aniline Oil, Aminobenzene)

Colourless liquid, soluble in alcohol and ether.

Grades: C.P.; Commercial.

Containers: drums.

Uses: In manufacture of organic compounds, intermediates, pharmaceuticals, dyestuffs, germicides, paint and varnish.

Manufacturer:

Naugatuck Chemicals Division of Dominion Rubber Co. Ltd.

ARSENIC TRIOXIDE (Arsenious Acid, White Arsenic, Arsenious Oxide)

White amorphous powder, odourless, tasteless, poisonous.

Containers: boxes, kegs, bags and barrels.

Uses: Manufacture of arsenic acid

and arsenicals; ceramic enamels; insecticides, rat poisons, sheep and cattle dip and hide preservative; mordant in dyeing and calico printing; medicine.

Manufacturer:

Deloro Smelting & Refining Co. Ltd.

ASCORBIC ACID (Vitamin C)

White crystalline or white powder.

Uses: Pharmaceutical; fortifying certain foods; as auxiliary to cure salts in manufacture of smoked meat products, bacon, weiners, frankfurters, etc; antioxidant; frozen fish; beer and ale, etc.

Manufacturer:

Merck & Company Limited.

ASPHALT

Brownish-black solid to semi-solid. Soluble in most organic solvents.

Containers: barrels.

Uses: Manufacture of black varnishes, paints, enamels, roof cements; in roofing and insulating papers; lining water tanks; engraving and lithography; water proofing purposes; coating pipes; for paving roads.

Manufacturers:

British American Oil Company.
Excelsior Refineries Limited.
Husky Oil & Refining Company.
Imperial Oil Limited.
Shell Oil Company of Canada Ltd.
Standard Oil Co. of British Columbia Ltd.

BARIUM CHLORIDE

Colourless crystalline material.

Use: Laboratory Chemical.

Manufacturer:

Anachemia Chemicals Limited (Reagent grade only)

BARIUM SULPHATE (Barytes, Barite)

Only crude, natural barytes presently available.

Uses: Oil well drilling; for manufacture of barium chemicals, lithopone and blanc fixe; filler for rubber goods, linoleum and paints.

Manufacturer:

Canadian Industrial Minerals Limited.

BENTONITE (Wilkinite, Colloidal Clay)

A type of clay having marked plasticity. Swells greatly on wetting.

Uses: Bonding agent in moulding sands; in graphite for pencil manufacture; filtering medium used in clarification and decolouration of liquids; in petroleum refining. Ingredient in soaps, cleaning and polishing compounds; in pharmaceuticals; candy manufacture.

Manufacturer:

Pembina Mountain Clays Limited.

BENZIDINE YELLOWS

Use: Colouring inks.

Manufacturer:

McArthur, Irwin, Limited.

BENZOL (Benzene)

Clear, colourless, inflammable liquid with pleasant characteristic odour. By-product in coke oven plant operation and coal tar distillation.

Various grades.

Containers: bottles, cans, drums, and tank cars.

Uses: Raw material for manufacture of many important organic chemicals and some plastics; solvent for fats, oils, waxes, gums, resins; used in manufacture of varnishes and lacquers, aeroplane dopes, and synthetic drugs; dry cleaning and special textile soaps; rubber cements; engraving and lithography; knock inhibitor in motor fuels.

Producers:

- Algoma Steel Corporation Limited.
- Dominion Steel & Coal Corporation Ltd.
- Dominion Tar & Chemical Co. Ltd.
- Hamilton By-Products Coke Ovens Limited.
- Montreal Coke & Manufacturing Company.
- Steel Company of Canada Limited.

BISMUTH GLYCOLYLARSANILATE

Yellowish to pink powder. Decomposes on heating.

Use: Medicinal.

Manufacturers:

- Delmar Chemicals Limited.
- Fine Chemicals of Canada Limited.

BISMUTH SALTS

- Bismuth subsalicylate U.S.P.
- Bismuth subnitrate N F
- Bismuth subgallate N F
- Bismuth subcarbonate, U S P and B P

Uses: Pharmaceutical preparations.

Manufacturers:

- Mallinckrodt Chemical Works Ltd.
- Merck & Company Limited.

BORDEAUX MIXTURE

Important insecticide made by mixing copper sulphate and lime. Various compositions.

Containers: bags, drums and barrels.

Manufacturers:

- Chipman Chemicals Limited.
- Niagara Brand Spray Company Ltd.
- Sherwin Williams Company of Canada Ltd.

BRONZE POWDERS

Mixture of various finely ground metals and alloys. Varied colours.

Uses: Flashlight powders; pigments in metallic lacquers and enamels; bronzing agents; coating papers; printing inks.

Manufacturer:

Canadian Bronze Powder Works Limited.

BUTYL ACETATE

Limpid colourless liquid with a fruity odour.

Containers: cans and drums.

Uses: Solvent for nitrocellulose; lacquers; leather dopes; aeroplane dopes; toilet preparations and cosmetics; food products; processing of other chemicals.

Manufacturers:

Canadian Chemical Company Limited.
Shawinigan Chemicals Limited.

BUTYL ALCOHOL (n-Butanol)

Limpid colourless liquid, winey odour.

Containers: cans and steel drums.

Chief Uses: Solvent for many alkaloids, camphor, shellac, gums and waxes; artificial leather; lacquers; perfumes; pharmaceuticals; base for other butyl compounds; alcohol denaturant; synthetic resins; cosmetics; flavouring extracts.

Manufacturers:

Canadian Chemical Company.
Shawinigan Chemicals Limited.

BUTYL OLEATE

Light coloured, oily liquid.

Containers: drums.

Uses: In rubber manufacture; in paints; toilet preparations; synthetic resin compounding; inks; as a plasticizer and lubricant.

Manufacturer:

Canadian Aniline & Extract Co. Ltd.

BUTYL PARA CRESOL, DI TERTIARY

White crystalline material.

Uses: In petroleum products; rubber compounds; food products; as an antioxidant.

Manufacturer:

Canadian Aniline & Extract Co. Ltd.

BUTYL STEARATE

Colourless, oily liquid.

Uses: Metal processing; paints; processing synthetic resins; cosmetics; as a plasticizer and lubricant.

Manufacturer:

Canadian Aniline & Extract Co.Ltd.

CADMIUM SULPHATE

White crystalline material.
Reagent grade only.

Manufacturer:

Anachemia Chemicals Limited.

CAFFEINE

White anhydrous powder or hydrated flakes.

Containers: bottles and cans.

Uses: In pharmaceuticals; in certain beverages.

Manufacturer:

Monsanto Canada Limited.

CAFFEINE COMPOUNDS

Caffeine Benzoate (powder)
Caffeine Citrated N F (powder)
Caffeine Salicylate powder

Uses: In pharmaceutical preparations.

Manufacturer:

Mallinckrodt Chemical Works Ltd.

CALAMINE (Prepared U S P Powder)

Pink powder consisting of zinc oxide with small addition of ferric oxide.

Uses: Pharmaceutical preparations.

Manufacturer:

Mallinckrodt Chemical Works Limited.

CALCIUM ACETATE (Acetate of Lime)

White powder, soluble in water, slightly soluble in alcohol. Decomposes on heating to yield acetone.

Uses: Manufacture acetates; mordant in dyeing and printing; inks.

Manufacturer:

Mallinckrodt Chemical Works Limited.

CALCIUM ARSENATE

Fine white powder, practically soluble in water. Coloured pink for identification purposes.

Containers: bags or metal or fibre drums.

Uses: A stomach insecticide, and hence, used against leaf-eating insects.

Manufacturers:

Chipman Chemicals Limited.
Niagara Brand Spray Company Limited.

CALCIUM CARBIDE

Greyish-black lumps. Reacts with water forming acetylene.

Containers: Drums (water tight).

Uses: Generation of acetylene, for illumination, welding and cutting; signal lights, etc; used in manufacture of calcium cyanamide; steel hardener; reducing agent.

Manufacturers:

North American Cyanamid Limited.
Shawinigan Chemicals Limited.

CALCIUM CHLORIDE

White crystalline or amorphous material. Various screen sizes or flakes. Takes up water readily.

Containers: drums.

Uses: For manufacture of various calcium chemicals; dehydrating agent, used for road dressing to keep down dust; in fire proof paints; in pharmaceutical preparations; water purification.

Manufacturer:

Brunner Mond Canada Limited.

CALCIUM CYANAMIDE ("cyanamide")

Greyish-black lumps, pellets or powder. Decomposed by water.

Containers: drums and barrels.

Uses: As a fertilizer; for making ammonia; case hardening steel; processing other chemicals.

Manufacturer:

North American Cyanamid Limited.

CALCIUM CYANIDE

Slate-grey powder. Generates hydrocyanic acid on addition of acid.

Uses: Killing ants, rats, mice,

moles; in fumigating greenhouses, flour and seed mills, for fumigating citrus trees; hardening iron.

Manufacturer:

North American Cyanamid Limited.

CALCIUM HYDRATE (Calcium hydroxide, slaked lime or hydrated lime)

White dry powder. Strongly alkaline reaction; made by action of water on lime.

Uses: Mortars and cements; calcium salts; causticizing soda; depilatory; in lime paints; in water treatment; purification of sugar; fertilizers; insecticides; pulp and paper; petroleum refining; ore dressing; metal refining and processing.

Manufacturer:

Aluminum Company of Canada Limited.

CALCIUM OXIDE (Lime, Quicklime)

White hard lumps, crumbling on exposure to moist air. Made by roasting calcium carbonate or limestone. Usually contains magnesia, alumina and iron oxide as impurities.

Grades: B.P. or U.S.P.; Technical; Agricultural; Building.

Uses: For making mortar and plaster; manufacture of chlorinated lime; dehairing hides; in chemical processes where cheap alkali is required; pulp and paper; many miscellaneous applications.

Manufacturers

A large number.

CALCIUM PANTOTHENATE (Vitamin B factor)

Odourless white powder.

Grades: U.S.P.

Uses: In pharmaceutical preparation and veterinary medicine.

Manufacturers:

Delmar Chemicals Limited.
Merck & Company Limited.

CALCIUM PHOSPHATE (Acid calcium phosphate; monobasic calcium phosphate)

White deliquescent crystalline powder or granules.

Grades: C.P.; Technical.

Containers: bags and drums.

Uses: In baking powder manufacture and cake mixes; inks; pharmaceuticals; in enamel frits.

Manufacturer:

Electric Reduction Sales Company Limited.

CALCIUM STEARATE

White powder, soluble in alcohol and some organic solvents; but insoluble in water.

Uses: Waterproofing; paints; inks; plastics manufacture and compounding; mould release agent.

Manufacturers:

H.L. Blachford Limited.
Mallinckrodt Chemical Works Limited.

CARBOLIC ACID

See Phenol.

CARBON BISULPHIDE

Clear colourless or faintly yellow liquid. Inflammable. Disagreeable smell unless pure.

Containers: cans, drums, tank cars.

Uses: In the production of viscose rayon; in production of other chemicals; herbicides and pesticides; good solvent for fats, resins, waxes, rubber and sulphur.

Manufacturer:

Cornwall Chemicals Limited.

CARBON BLACK

A very finely-divided form of pigment carbon made by the controlled combustion of natural gas or petroleum refinery gases.

Uses: Printers ink; automobile tire and rubber goods manufacture; paints and enamels; carbon papers and ribbons; stove polishes and many miscellaneous applications.

Manufacturer:

Cabot Carbon of Canada Limited.

CARBON TETRACHLORIDE

A poisonous, non-inflammable, colourless liquid with a peculiar odor and yielding heavy vapors.

Chief Uses: Ore dressing; metal refining and processing; solvent; fire extinguishers; cleaning compounds; metal polishes; rubber cements.

Manufacturers:

Cornwall Chemicals Limited.
Dow Chemical of Canada Limited.

CASCARA EXTRACTS

Uses: Medicinal.

Manufacturer:

Fine Chemicals of Canada Limited.

CASEIN HYDROLYSATES

Uses: Medicinal.

Manufacturer:

Delmar Chemicals Limited.

CAUSTIC SODA

See Sodium Hydroxide.

CHLORINE

Heavy, greenish-yellow gas at ordinary temperatures; liquid under pressure; pungent irritating odour. Soluble in water and alkalies.

Containers: 100 and 150 lbs. steel cylinders and in tank cars.

Uses: Water purification; bleaching of pulp and paper and textiles; organic synthesis; chlorination; extraction of metals from their ores; manufacture of bleaching solutions; military poison gas.

Manufacturers:

Aluminum Company of Canada Limited.
Canadian Industries Limited.
Columbia Southern Chemical Corporation.
Dow Chemical of Canada Limited.
Western Chemicals Limited.

CHLOROFORM (Trichloromethane)

A clear, colourless, highly refractive, volatile liquid with a characteristic odour.

Grades: Technical; C.P.; U.S.P.

Containers: bottles, tins and drums.

Uses: Solvent for fats, mineral and essential oils, waxes, and many organic chemicals; as an anesthetic, insecticide and vermifuge; in dry cleaning as a spotter.

Manufacturer:

Canadian Industries Limited.

CHOLESTEROL

Powder or crystalline material.

Uses: Medicinal; for further processing.

Manufacturer:

Canada Packers Limited.
(Fine Chemicals Department)

CHOLIC ACID

Use: Medicinal and for processing into other compounds.

Manufacturer:

Canada Packers Limited.
(Fine Chemicals Department)

CHROME GREENS (All shades)

Uses: Colouring inks, paints, varnishes and lacquers.

Manufacturers:

Brandram-Henderson Limited.
McArthur, Irwin, Limited.

CHROME YELLOWS AND ORANGES (All shades)

Pigments consisting of the chromates of lead, zinc or barium.

Grades: C.P.

Uses: For colouring paints, enamels, printing inks, etc.

Producers:

Brandram-Henderson Limited.
McArthur, Irwin, Limited.

CITRIC ACID

White granular or crystalline powder. Odourless.

Containers: drums and barrels.

Grades: U.S.P.; B.P.; C.P.; Granulated; Powdered.

Uses: Manufacture of citrates; flavouring extracts; in soft drinks; confectionery; pharmaceuticals; ink manufacture; textile dyeing and printing, etc.

Manufacturers:

Kemball, Bishop & Company (Canada) Ltd.
Merck & Company Limited.

COBALT OXIDE, BLACK

Black powder.

Uses: Pigment in certain inks and for ceramics.

Manufacturer:

Deloro Smelting & Refining Company Ltd.

COBALT SALTS (Other)

Cobalt Acetate (crystals)

Uses: Paint dryers; inks.

Cobalt Carbonate (purified)

Uses: Paint pigments; stock and poultry feeds.

Cobalt Chloride (crystals, purified and A.R.)

Uses: Inks; electroplating.

Cobalt Nitrate (crystals, purified and A.R.)

Uses: Paint pigments; ceramics.

Manufacturer:

Mallinckrodt Chemical Works Limited.

COBALT SULPHATE

Red powder soluble in water.

Grades: Purified; amorphous (35% cobalt approx), and Analytical Reagent.

Uses: Electroplating; glazes for ceramics; stock and poultry feed mixtures; inks; textile processing.

Manufacturers:

Deloro Smelting & Refining Company Ltd.
Mallinckrodt Chemical Works Limited.

COKE, PETROLEUM

Black porous material, very high in carbon and low in ash. Residue from coking of heavy petroleum oils.

Uses: Manufacture of metallic carbides and similar products; in manufacture of electrodes for metallurgical processes.

Manufacturers:

British American Oil Company Ltd.
Imperial Oil Limited.
McColl Frontenac Oil Company Ltd.

COPPER NAPHTHENATE

A green solid material, soluble in gasoline and hydrocarbon oils. High germicidal power.

Uses: As a fungicide and preservative for wood, fabrics and cordage.

Manufacturer:

Nuodex Products of Canada Limited.

COPPER OLEATE

A poisonous brown powder or paste.

Uses: Fungicide; preservation of fishing nets and lines; wood perservative.

Manufacturers:

H.L. Blachford Limited.
Nuodex Products of Canada Limited.

COPPER SULPHATE (Bluestone)

Blue, crystalline powder or crystals. Crystal contains five molecules of water and when this water of crystallization is driven off by heat or lost on exposure to dry air, the powder is white.

Containers: multiwall paper bags.

Uses: Manufacture of other copper salts; paris green and bordeaux mixture; as a germicide, insecticide and fungicide; wood preservative; copper plating; photo engraving; purifying water in swimming baths

and water supplies; petroleum refining.

Manufacturer:

Canadian Copper Refiners Limited.

CRESOL (Cresylic Acid)

Obtained from coal tar. Colourless or brownish yellow liquid with phenolic odour. Poisonous.

Uses: Antiseptic and disinfectant; raw material for certain types synthetic resins; glues and adhesives; inks; ore dressing; textile chemicals; processing other chemicals.

Manufacturer:

Dominion Tar & Chemical Company.

CRYOLITE (Greenland spar, also synthetic)

A fluoride of sodium and aluminum. Grey white powder when ground.

Uses: Insecticides; glues and adhesives; certain types of glasses; enamels; flux in aluminum manufacture.

Producer:

Aluminum Company of Canada Limited.

CUPRIC CITRATE

A bluish-green powder.

Grade: U.S.P.

Use: Medicinal.

Manufacturer:

Anachemia Chemicals Limited.

CUPRIC SULPHATE

Blue crystalline material.

Use: Analytical reagent.

Manufacturer:

Anachemia Chemicals Limited.

CYANOCOBALAMIN (Vitamin B 12)

Forms: crystalline; triturations; solid. All in U.S.P. grades.

Uses: In pharmaceutical preparations and veterinary medicine.

Manufacturer:

Merck & Company Limited.

CYCLOHEXANOL

Colourless liquid with mildly camphoraceous odour. Miscible with the usual solvents.

Uses: In textile soaps and compounds; as a solvent in the paint and varnish and the natural and synthetic resin industries; inks; polishes and dressings, metallic soaps and detergents.

Manufacturer:

Howard & Sons (Canada) Limited.

D. D. D. (T. D. E.) Formulations

Emulsifiable concentrate and wettable powder. Active constituent is dichloro-diphenyl-dichloroethane.

Uses: Primarily for control of hornworm on tobacco and powder for Red Banded Leaf Roller on apples.

Producer:
Chipman Chemicals Limited.

D. D. T. Formulations

Emulsifiable concentrate and wettable powder. Active constituent dichloro-diphenyl-tricholorethane.

The powder is the standard D.D.T. spray formulation, air milled to average 3 micron particle size for more uniform coverage. Controls a wide range of insects on horticultural and ornamental crops.

Producer:

Chipman Chemicals Limited.

DEHYDROCHOLIC ACID

Crystalline material, slightly soluble in water. Sodium salt very soluble.

Use: Medicinal.

Manufacturers:

Canada Packers Limited
(Fine Chemicals Dept.)
Fine Chemicals of Canada Limited.

DENATURED ALCOHOL

Ethyl alcohol rendered entirely unfit for beverage use by addition of denaturants prescribed by Governments. Regulations probably vary in each country.

Uses: Analytical chemistry; cosmetics; disinfectants; gums; inks; paints, varnishes and lacquers; solvent in many chemical manufacturing and extraction processes.

Manufacturers:

British Columbia Distillery Company Limited.
Calvert Distillers Ltd.
Canadian Industrial Alcohol and Chemicals Ltd.
Commercial Alcohols Limited.
Distillers Corporation Limited.
Gooderham & Worts Limited.
Montreal Products Company Limited.
Ontario Paper Company Limited.

DIBUTYL PHTHALATE

A water white, non-volatile, oily liquid.

Containers: drums.

Uses: As a plasticiser in nitro-cellulose and cellulose acetate lacquers, synthetic resins and rubbers; paper coatings for food products; lubricating agent; perfume fixative; adhesives.

Manufacturer:

Shawinigan Chemicals Limited.

DICHLOROETHYL ETHER

A clear, colourless liquid with a sweet penetrating odour somewhat like chloroform.

Containers: drums.

Uses: Scouring agent; processing wool textiles; selective solvent; chemical intermediate; soil fumigant; paint remover formulations.

Manufacturer:

Dow Chemical of Canada Limited.

DICYANDIAMIDE

Greyish-white powder soluble in water and alcohol.

Uses: In fertilizers; intermediate in manufacture of certain organic compounds; for certain pharma-

ceutical and cosmetics specialties; synthetic resins.

Manufacturer:

North American Cyanamid Limited.

DICYCLOHEXYL PHTHALATE

White crystalline solid with a melting point 63-65° C.

Uses: As a plasticiser for lacquers and films in the synthetic resins and paint and varnish industries.

Manufacturer:

Howard & Sons (Canada) Limited.

DIELDRIN FORMULATIONS

Insecticides containing 1,2,3,4,10, 10 Hexachloro - 6,7 - epoxy - 1,4,4a,5,6,7,8,8a - octa hydro - 1,4,5,8 - dimethano-naphthalene.

Forms: Dust, emulsifiable concentrate, wettable powder.

Uses: Against insects affecting field and garden crops and certain fruit crops, also for control of insects in houses and other buildings.

Producer:

Chipman Chemicals Limited.

DIETHANOLAMINE

Straw coloured liquid with mild ammoniacal odour. Soluble in water and miscible with most organic solvents.

Uses: Absorbent for acid gases, especially for removal of hydrogen sulphide from sour natural gas; softening, moistening and emulsifying agent.

Manufacturers:

Canadian Aniline & Extract Co.Ltd.
Carbide Chemicals Company.
Dow Chemical of Canada Limited.

DIETHYLENE GLYCOL

Colourless, hygroscopic liquid. Soluble in alcohol, water, ether.

Uses: In glues; composition cork; inks; textile printing; as a solvent for gums, resins, cellulose ester lacquers and plastics; polishes and dressings; textile chemicals.

Manufacturers:

Carbide Chemicals Company.
Dow Chemical of Canada Limited.

DIHYDROXYALUMINUM AMINOACETATE

Impalpable powder, insoluble in water.

Uses: Medicinal, antacid.

Manufacturer:

Delmar Chemicals Limited.

DIISOOCTYL PHTHALATE

Substantially colourless liquid.

Use: As a plasticiser for synthetic resins, particularly vinyl compounds.

Manufacturer:

Monsanto Canada Limited.

DIMETHYLCYCLOHEXYL PHTHALATE

Pale amber viscous liquid, insoluble in water but miscible with the usual

solvents.

Uses: Plasticiser for nitrocellulose and synthetic resin finishes; in certain inks.

Manufacturer:

Howard & Sons (Canada) Limited.

DIOCTYL ADIPATE

Clear, substantially colourless and odourless liquid.

Containers: cans and drums.

Uses: As a primary plasticiser for synthetic resins imparting outstanding low temperature flexibility, particularly to vinyl products; in the non-plastic field as the base for low temperature lubricants and greases.

Manufacturers

Canadian Resins & Chemicals Limited.
Monsanto Canada Limited.

DIOCTYL AZELATE

A high boiling ester. Substantially colourless and odourless liquid.

Containers: cans and drums.

Uses: A plasticiser imparting outstanding low temperature flexibility to synthetic resins, particularly vinyls; in low temperature oils and greases for aircraft, military, naval and other equipment exposed to arctic conditions.

Manufacturer:

Canadian Resins & Chemicals Limited.

DIOCTYL PHTHALATE

Colourless, practically odourless, stable oily liquid.

Containers: cans and drums.

Uses: Primary plasticiser for most synthetic resins, especially vinyl resins, imparting permanent flexibility, low temperature flexibility and heat stability.

Manufacturers:

Canadian Resins & Chemicals Limited.
Monsanto Canada Limited.

DIPHENYLAMINE (Phenyl Aniline)

Colourless to greyish crystals. Soluble in alcohol and ether but slightly soluble in water.

Grade: Technical.

Uses: In organic synthesis; dyestuff manufacture.

Manufacturer:

Naugatuck Chemicals, Division of Dominion Rubber Company Ltd.

ENDRIN FORMULATIONS

Insecticides in which the active ingredient is 1,2,3,4,10,10 - hexachloro - 6,7 - epoxy - 1,4,4a,5,6,7,8,8a - octahydro - 1,4 - endo, endo - 5,8 - dimethanonaphthalene.

Forms: Emulsions and wettable powders.

Uses: Against insects affecting tobacco, late cabbage, cauliflower, sugar beets, swede turnips and potatoes and as a bait for army worms.

Producer:

Chipman Chemicals Limited.

ETHYL ACETATE

Colourless, fragrant, inflammable liquid.

Containers: cans and steel drums.

Uses: Solvent; organic synthesis; flavourings; perfumery; artificial leather; nitrocellulose varnishes, lacquers and dopes; inks; pharmaceuticals.

Manufacturers:

Shawinigan Chemicals Limited.

ETHYL ALCOHOL (Grain alcohol, Cologne spirit)

Colourless limpid volatile liquid with ethereal vinous odour and a pungent taste. There are a number of grades, the major distinction being between potable alcohol and alcohol for industrial uses.

Principal Grades: Technical; U.S.P.; Absolute Alcohol; Proof Spirit, Under Proof and Over Proof Spirit; Denatured Alcohol.

Chief Uses: Pharmaceutical and cosmetic industries; drugs, medicinal chemicals; soaps, perfumes; in the production of explosives, nitrocellulose, synthetic rubber; in the food industries, in the production of vinegar, vanilla extract, etc.; as a solvent in paints, varnishes, lacquers, shellac, adhesives, inks, duplicating equipment, preservatives, cleaning fluids; as an anti-freeze, de-icing fluid, fuel; in the manufacture of other chemicals.

Manufacturers:

Alberta Distillers Limited.
British Columbia Distillery Co.Ltd.
Calvert Distillers Limited.
Canadian Industrial Alcohols and Chemicals Co. Ltd.
Commercial Alcohols Limited.
Corby Distillery Limited.
Distillers Corporation Limited.
Gooderham & Worts Limited.
Montreal Products Company Limited.
Ontario Paper Company Limited.

2- ETHYL HEXANOL (Octanol 2)

A high boiling 8 carbon alcohol. Water-clear.

Containers: 17-E 45 gallon (Imperial) steel drums, net weight approx. 370 lbs.

Use: Primarily as an intermediate in the manufacture of dioctyl phthalate and a variety of other octyl ester plasticisers, such as dioctyl adipate, dioctyl sebacate, dioctyl azelate, etc.

Manufacturer:

Canadian Resins & Chemicals Limited.

ETHYLENE DICHLORIDE (Di-Chloro-Ethane; Dutch Liquid)

Colourless oily liquid with chloroform-like odour and sweet taste. Stable in the presence of water, alkalies and acids. Will not corrode metals. Burns with difficulty.

Containers: cans and drums.

Uses: Solvent for fats, oils, waxes, gums, etc.; paint and varnish removers; dry cleaning.

Manufacturer:

Dow Chemical of Canada Limited.

ETHYLENE GLYCOL (Glycol; Ethylene Alcohol)

Clear, colourless, hygroscopic, syrupy liquid with sweet taste. Lowers freezing point of water in solutions.

Containers: drums, tank cars.

Chief Uses: For antifreeze for automobile and aero engine radiators; manufacture of low freezing dynamite; solvent for many organic compounds, lacquers, polishes and dressings, printing inks, fruit flavours, waxes, etc.; textile processing; tobacco; in glues and adhesives; in cellophane production.

Manufacturers:

Carbide Chemicals Company.
Dow Chemical of Canada Limited.

ETHYLENE OXIDE

Colourless gas at ordinary temperatures, liquified to colourless liquid at low temperatures. Flammable.

Containers: steel cylinders.

Uses: Fumigation, raw material for further chemical products.

Manufacturer:

Dow Chemical of Canada Limited.

FATTY ACIDS - Vegetable.

In this group, the fatty acids made from vegetable oils are included, e.g. soya fatty acids, cocoanut fatty acids, linseed fatty acids, etc.

Uses: Adhesives; special soaps; cosmetics; inks and carbon papers; buffing compounds; core oils; lubricating greases; protective coating products; polishes; textile lubricants; softeners and finishers; insecticides.

Manufacturers:

Canada Packers Limited.
W.C. Hardesty Company of Canada Limited.
S.F. Lawrason and Company Limited.

FATTY ACID ETHANOLAMIDES

Foaming and foam stabilizing agents in liquid and flake form.

Uses: Soaps and detergents; toilet preparations and cosmetics; textile chemicals.

Manufacturer:

Canadian Aniline & Extract Company Ltd.

FATTY ACID GLYCEROL AND POLYGLYCOL ESTERS

Emulsifying agents and detergents.

Uses: Adhesives; insecticides and pesticides; textile chemicals; detergents; paints; toilet preparations; food products; polishes and dressings.

Manufacturers:

Canadian Aniline & Extract Company Ltd.
Chemical Developments of Canada Ltd.

FERRITE OXIDES (SYNTHETIC)

See iron oxides (synthetic)

FERROPHOSPHOROUS

An alloy of iron and phosphorus. Dense brownish-black solid.

Uses: In the steel industry for the adjustment of the phosphorus content

of special steels; also used in petroleum refining.

Manufacturer:

Electric Reduction Sales Co. Limited.

FORMALDEHYDE (Formalin; Oxymethylene)

A gas at ordinary temperature and pressure. Sold and transported as an aqueous solution, usually containing 37% formaldehyde by weight or 40% by volume.

Containers: Bottles, carboys, drums, barrels, and tank cars.

Uses: Raw material in combination with phenol, urea or melamine to form plastics and synthetic resins; for the manufacture of various types of organic chemicals; explosives; embalming fluids; disinfectant and bactericide; preservative for foods, milk, rubber latex; in tanning and preserving hides; in photography, for hardening gelatin plates and papers; to render casein, albumin and gelatin insoluble; some medicinal uses.

Manufacturers:

Bakelite Company.
Canadian Chemical Company Ltd.
St. Maurice Chemicals Limited.

GLANDULAR EXTRACTS

A range of extracts from animal glands.

Uses: Medicinal

Manufacturer:

Fine Chemicals of Canada Limited.

GLYCERINE (Glycerol; 1,2,3, Propane Triol)

Clear, colourless or pale yellow, odourless, syrupy liquid with a sweet, slightly burning taste. Obtained from spent lye in the manufacture of soap. Also produced synthetically in the United States.

Grades: Crude: Saponification (88%) and soap lye (80%)
Refined: C.P. & B.P.; High Gravity (99%), Dynamite (99%) Yellow Distilled.

Containers: tank cars, drums, tins and bottles.

Uses: In explosives for production of nitroglycerine; for alkyd resin mfg; toilet and other special soaps; medicinal and pharmaceutical preparations; in foodstuffs as preservative and sweetener; tobacco; liqueurs; printers ink rolls, special inks; as an antifreeze and many miscellaneous applications where its solvent, humecant, plasticising, sweetening or softening properties are useful.

Producers:

Canada Packers Limited.
Colgate-Palmolive Limited.
W.C. Hardesty Co. of Canada Limited.
Lever Bros. Limited.
Proctor & Gamble Company of Canada Limited.

GLYCOL ETHERS

Glycol ethers are powerful solvents with mild odours. Some are completely water soluble and are solvents for many dyestuffs, oils, waxes and resins. They are of especial importance as lacquer solvents, components of hydraulic brake and shock absorber fluids.
Ethylene Glycol Monoethyl Ether "Cellosolve" Solvent

Ethylene Glycol Monomethyl Ether
"Methyl Cellosolve"

Ethylene Glycol Monobutyl Ether
"Butyl Cellosolve"

Ethylene Glycol Monoethyl Ether Acetate
"Cellosolve Acetate"

Uses: Nitrocellulose lacquers; solvent for textile and leather dyes; solvent for many synthetic resins; in textile and metal cutting oils; duplicating fluids and inks; processing other chemicals for plasticizers; toilet preparations; polishes and dressings; blues and adhesives.

Diethylene Glycol Monoethyl Ether
"Carbitol"

Diethylene Glycol Monomethyl Ether
"Methyl Carbitol"

Diethylene Glycol Monobutyl Ether
"Butyl Carbitol"

Uses: Nitrocellulose lacquer solvent; special inks; specialty soaps; textile printing and dyeing processes; solvent for resins; as brake fluid diluents and many hydraulic fluids; adhesives; cosmetics; polishes and dressings.

Manufacturer:

Carbide Chemicals Company.

GOLD CYANIDE 88%

GOLD POTASSIUM CYANIDE 46% and 67%

GOLD SODIUM CYANIDE 46% and 67%

White or yellow crystalline powders, soluble in water.

Uses: Mainly in the electroplating industry.

Manufacturer:

Johnson Matthey & Mallory Limited.

GUANIDINE NITRATE

White crystalline powder.

Uses: In pharmaceutical preparations.

Manufacturer:

North American Cyanamid Limited.

HANSA YELLOW

A class name for a group of organic azo pigments having good brightness, light fastness and alkali resistance.

Uses: Colouring inks; paints; varnishes; lacquers; plastics and synthetic resins.

Manufacturers:

Brandram-Henderson Limited.
McArthur, Irwin, Limited.

HERBICIDES

Brush Killers

2, 4-D and 2, 4, 5-T Formulations

For control of most species of brush and hard-to-kill weeds.

Manufacturers:

Chipman Chemicals Limited.
Naugatuck Chemicals, Division of Dominion Rubber Co. Ltd.

Sodium Chlorate

Manufacturer:

Electric Reduction Sales Co. Limited.

Weed Killers

2, 4-D (2, 4- Dichlorophenoxyacetic acid)

As acid, esters and salts for weed control in cereal crops, pastures, fairways and road sides.

Manufacturers:

Chipman Chemicals Limited.
Naugatuck Chemicals, Division of Dominion Rubber Co. Limited.

Methoxone Amine

The amine formulation of M.C.P., for weed control in canning peas and grain crops that are sensitive to 2,4-D.

Manufacturer:

Chipman Chemicals Limited.

Methoxone Sodium

The sodium salt formulations of M.C.P., for weed control in grain crops sensitive to 2, 4-D, and under certain conditions to grain seeded down.

Manufacturer:

Chipman Chemicals Limited.

HEXACHLOROETHANE (Carbon Trichloride; Perchloroethane)

Colourless crystals with camphor like odour.

Grade: Technical.

Containers: drums and barrels.

Uses: In smoke generators for naval and military use; pyrotechnics; camphor substitute; rubber accelerator.

Manufacturer:

Canadian Industries Limited.

HYDRATED LIME

See calcium hydrate.

HYDROCHLORIC ACID (Muriatic acid)

Clear, colourless or slightly yellow aqueous solution of hydrogen chloride gas. A fuming, pungent liquid.

Grades: U.S.P. or B.P.; C.P.; Technical.

Containers: glass bottles, carboys, tank cars.

Uses: Leather industry; organic synthesis; dye manufacture; dyeing; metallurgy; electro plating; paint pigments; glue and gelatin manufacture; process engraving and lithography; textiles (bleaching, dyeing, printing); ink manufacture; tinning and soldering; chemical manufacture.

Manufacturers:

Canadian Industries Limited.
Dow Chemical of Canada Limited.
Nichols Chemical Company Limited, The Western Chemicals Limited.

HYDROGEN PEROXIDE

A colourless heavy liquid shipped and used in the form of aqueous solutions of various strengths. Powerful oxidizing agent.

Containers: bottles, carboys, and aluminum drums.

Uses: Bleaching agent in textile, and pulp and paper industries; for oils and fats, gelatin, straw, bones, hair and feathers; oxidizing agent; food preservative; disinfecting

water and hides; in pharmaceutical preparations, mouth washes, dentifrices, sanitary lotions; in photography; manufacture dyestuffs.

Manufacturers:

Canadian Industries Limited.
DuPont Company of Canada Ltd.
Mallinckrodt Chemical Works Ltd.

1,2 - HYDROXYSTEARIC ACID

A hard, amorphous, waxy solid with practically no taste or colour. It is capable of all the normal reactions of a fatty acid, such as forming soaps with alkalies, esters with alcohols, etc., but in addition it is capable of some of the reactions of a fatty alcohol, through the hydroxyl group.

Uses: Lubricating greases; inks; cosmetics; pharmaceutical preparations; polishes; candles; leather dressings; textile sizes and chemicals; protective coatings.

Manufacturer:

W.C. Hardesty Company of Canada Ltd.

IODINE

Poisonous, corrosive. Purplish-black crystals. Iodine vapour given off if exposed.

Grades: B.P. or U.S.P.; A.R.

Containers: bottles, jars, and kegs.

Uses: In medicine as germicide and antiseptic; in manufacture of organic compounds and certain dyestuffs; for production of iodides, iodates and tincture of iodine; analytical reagent.

Manufacturers:

Mallinckrodt Chemical Works Ltd.
Merck & Company Limited.

IODOFORM (Triiodomethane)

Small, yellow crystals or powder with a characteristic penetrating odour. Soluble in most organic solvents.

Grades: Technical; B.P. or U.S.P.

Uses: Antiseptic in medicine.

Manufacturers:

Mallinckrodt Chemical Works Ltd.
Merck & Company Limited.

IRON OXIDES (Synthetic)

Pigment powders, produced by the controlled oxidation of iron. A wide range of shades in yellows, reds and browns.

Uses: For colouring paints, inks, flooring tiles (asphalt and cement), concrete (monolithic and units such as bricks and blocks), rubber goods, plastics and synthetic resins; toilet preparations and cosmetics; polishes and dressings; animal food supplements; fertilizers; foundry cores; pharmaceuticals.

Manufacturer:

Northern Pigment Co. Limited.

ISOBUTYL ALCOHOL (Isobutanol)

Water-white, volatile liquid, with a mild alcoholic odour.

Containers: drums and tank cars.

Uses: Pharmaceutical preparations; brake and hydraulic fluids; paint

solvent; plastics manufacture and compounding; insecticides and pesticides; glues and adhesives; processing of other chemicals.

Manufacturer:

Canadian Chemical Company Ltd.

ISOPROPYL ALCOHOL: (Isopropanol)

Colourless, clear, mobile liquid with a pleasant odour slightly stronger than that of ethyl alcohol.

Containers: cans and drums.

Uses: Replaces ethyl alcohol in many of its applications; lacquer and thinner formulations; spirit varnishes; solvent of alkaloids; essential oils, gums, resins and many other organic and inorganic materials; manufacture of pectin; germicide or preservative in cosmetic and toilet preparations; in pharmaceutical preparations and perfumes; surgical antiseptic and rubbing alcohol; inks; de-icing and anti-icing fluids; xanthate manufacture for ore flotation; herbicides and pesticides.

Manufacturer:

Shell Oil Company of Canada Ltd.

KHELLIN

Crystalline material for the use of laboratories manufacturing preparations for the treatment of heart disease.

Manufacturer:

Fine Chemicals of Canada Limited.

LAURIC DIETHANOLAMIDES

Uses: In tanning and leather dressings; textile processing; toilet preparations and cosmetics; soaps and detergents.

Manufacturer:

Chemical Developments of Canada Ltd.

LEAD ARSENATE

Fine white powder, practically insoluble in water, coloured pink for identification purposes. Poisonous.

Containers: bags or metal or fibre drums.

Uses: A stomach insecticide, non-phytotoxic.

Manufacturers:

Chipman Chemicals Limited.
Niagara Brand Spray Company Ltd.

LEAD STEARATE

White powder, technical grade.

Uses: In plastics manufacture.

Manufacturer:

Mallinckrodt Chemical Works Limited.

LEAD SULPHATE

A poisonous, white, crystalline substance.

Containers: kegs and barrels.

Chief Uses: Paint pigments.

Manufacturer:

McArthur, Irwin, Limited.

LECITHIN

Brownish-yellow, waxy, material consisting of a mixture of the diglycerides of stearic, palmitic and oleic acids linked to the choline ester of phosphoric acid. Obtained mainly from soya beans.

Uses: In certain food products; inks; pharmaceuticals; paint and pigment pastes; polishes and dressings; lubricating oils and greases; toilet preparations; stock and poultry feeds.

Producers:

Canadian Lecithin Company Limited.
Lecithin Products (Canada) Limited.

LIGNIN

A dark brown powder derived from waste sulphite liquor.

Uses: In certain synthetic resin products; in concrete to help prevent cracking; raw material for chemical processing.

Manufacturer:

Howard Smith Paper Mills Limited.

LIGNOSOLS (Salts of Lignosulphonates)

These are products recovered from spent sulphite liquors. By chemical modification of residues a series of substances possessing special properties have been developed.

Alkaline Sodium Lignosulphonate Lignosol X_2D, X_2

Uses: Reduction of moisture content of cement slurries; in ceramics, reduces moisture requirements and improves plasticity; dispersant in industrial cleaners.

Ammonium Lignosulphonate- Lignosol T S D & T S

T S is a 50% solution of T S D.

Uses: Primarily in tanning of leather; insecticides and pesticides.

Calcium Lignosulphonate (Sugar free) Lignosol S F

Uses: Concrete plasticizer, cement clinker grinding aid; in metal refining and processing.

Lignosol B D & D

B is 50% solution of B D

A hygroscopic, tan-coloured, free-flowing powder, readily soluble in cold or hot water. Cakes in humid weather.

Containers: moisture proof bags.

Uses: For treatment of gravel surfaced highways as a dust layer, for stabilization and to prevent frost heaving; as a foundry core binder, refractory binder; ceramic plasticizer; in linoleum cement and as an adhesive in the preparation of briquettes and pellets.

Sodium Lignosulphonate - Lignosol X D, X

Light tan-coloured powders.

Uses: Reduction of water in wall board plaster; tanning; insecticides and pesticides; as a dispersant.

Sodium Lignosulphonate (Sugar free) Lignosol S F X

Tan-coloured powder.

Uses: Dispersant in acid cleaners and in boiler feed water treatment.

Manufacturer:

Lignosol Chemicals Limited.

(Literature is available on all these products and on others still in the development stage).

LIME

See calcium oxide.

LITHARGE (Yellow Lead Oxide; Lead Monoxide)

Heavy yellow to yellowish-red powder.

Containers: kegs and barrels.

Uses: In manufacture of storage batteries; ingredient in rubber manufacture; petroleum refining; insecticides; linoleum; glass, pottery and enamel; pharmaceuticals; paints; metal refining.

Manufacturer:

McArthur, Irwin, Limited.

LIVER EXTRACTS

A wide range of powders and pastes.

Uses: Medicinal.

Manufacturers:

Canada Packers Limited
(Fine Chemicals Dept.)
Fine Chemicals of Canada Limited.

MAGNESIA (Magnesium Oxide, Calcined Magnesia)

White powder.

Uses: Magnesia cements; refractories; furnace linings; pipe coverings; heat insulating.

Manufacturer:

Aluminum Company of Canada Limited.

MAGNESIUM STEARATE

A white powder insoluble in water.

Uses: Pharmaceutical preparations; toilet preparations; glues and adhesives; paint flatting agent.

Manufacturer:

H.L. Blachford Limited.
Mallinckrodt Chemical Works Limited.

MALATHON FORMULATIONS (Malathion)

Insecticides in which the active principle is O,O-dimethyl dithiophosphate of diethyl mercaptosuccinate.

Forms: Dust, emulsions and wettable powder.

Uses: Against a wide range of fruit, field and garden insects, and especially as a miticide; also for the control of flies in farm buildings.

Producer:

Chipman Chemicals Limited.

MEDICINAL PLANT EXTRACTS

A range of powdered extracts of medicinal roots and plants.

Uses: In pharmaceuticals and medicinals.

Manufacturer:

Fine Chemicals of Canada Limited.

MELAMINE RESINS

For use only in protective coatings and in adhesives.

Manufacturer:

Monsanto Canada Limited.

MERCURY AND SALTS OF MERCURY

Mercury - Triple distilled; Brilliant; A.R.; U.S.P.

Uses: Pharmaceutical preparations; in measuring instruments and scientific apparatus.

Mercury Chloride (Corrosive Sublimate)

Grades: U.S.P. Powder or granular; Reagent; Technical.

Uses: Disinfectant; pharmaceutical preparations; wood preservation; tanning leather; fungicide; analytical reagent.

Mercury Chloride (calomel)

N F (Powder); Reagent; Technical.

Uses: Pharmaceutical preparations and Analytical Reagent.

Mercury Iodide

Red N F (Powder)

Uses: Disinfectants; pharmaceutical preparations.

Mercury Oxide Red

N F (Powder); Technical.

Uses: Fungicides; paint pigments.

Mercuric Oxide Yellow

N F (Powder); Technical.

Uses: Pharmaceutical preparations; paint pigments.

Manufacturers:

Anachemia Chemicals Limited (Mercury only)
Mallinckrodt Chemical Works Ltd.
Merck & Company Limited.

METHANOL (Methyl Alcohol; Wood Alcohol; Columbian Spirits)

A clear, colourless, volatile and inflammable liquid. Poisonous.

Containers: bottles, cans, drums and tank cars.

Uses: For manufacture of formaldehyde; organic synthesis; denaturing ethyl alcohol; general solvent; anti-freeze; in some paints, varnishes and paint removers; insecticide preparations; pharmaceutical and toilet preparations; motor fuels, jet fuels.

Manufacturer:

Canadian Chemical Company Limited.

3-METHOXYBUTANOL

A methyl ether of 1, 3-Butylene Glycol and a water-white liquid in colour with a mild odour. Miscible with water and most organic solvents.

Containers: drums and tank cars.

Uses: In hydraulic fluids; solvent for nitrocellulose, phenolic and alkyd resins; textile and leather dyes; printing inks and wood stains.

Manufacturer:

Canadian Chemical Company Limited.

METHYL AMYL ACETATE

A water-white liquid and a high boiling active solvent.

Uses: Solvent in nitrocellulose lacquers; in the concentration and purification of antibiotics.

Manufacturer:

Canadian Chemical Company Limited.

METHYLCYCLOHEXANOL

A colourless liquid with camphoraceous odour.

Uses: Solvent for sulphated fatty alcohol salts, natural and synthetic resins, oils, dyes; in certain textile soaps and detergents; solvent in paint and varnish industry; polishes and dressings; inks.

Manufacturer:

Howards & Son (Canada) Limited.

METHYL ISOBUTYL CARBINOL (Methyl Amyl Alcohol, MIBC)

Water-white liquid with a pleasant odour.

Containers: drums and tank cars.

Uses: Good solvent for oils, waxes and some resins; in nitrocellulose lacquers; in brake fluids as component; frothing agent in ore flotation.

Manufacturer:

Canadian Chemical Company Limited.

METHYL ISOBUTYL KETONE (MIBK)

Water-white liquid having high solvency for cellulose esters, nitrocellulose and many natural and synthetic resins.

Uses: In vinyl and nitrocellulose lacquers; paint remover; airplane dopes; adhesives and rubber cements; dewaxing oils.

Manufacturer:

Canadian Chemical Company Limited.

MILORI AND CHINESE BLUE (Iron type)

A form of ferri-ferrocyanide, an iron pigment.

Uses: For laundry blue; lithographic and printing inks; lacquers; paints; varnishes; pigments.

Manufacturers:

Brandram-Henderson Limited.
McArthur, Irwin, Limited.

MOLYBDATE ORANGES, C.P.

Pigments largely consisting of lead chromate and lead molybdate.

Uses: For colouring paints; printing inks; synthetic resins and plastics.

Producers:

Brandram-Henderson Limited.
McArthur, Irwin, Limited.

MONOCHLOROACETIC ACID

White flaky solid with a characteristic sharp odour. Stronger acid than acetic and soluble in water, ethyl alcohol, benzene and chloroform. Crystals are deliquescent and should be kept out of contact with air.

Containers: barrels or drums.

Uses: Organic chemical manufacture; glues and adhesives, herbicides and pesticides; textile chemicals; food products.

Manufacturer:

Shawinigan Chemicals Limited.

MONOETHANOLAMINE

A moderately viscous liquid and one of the most hygroscopic organic compounds.

Uses: As an alkaline conditioning agent and plasticizer; forms soaps with fatty acids; for absorbing carbon dioxide in production of solid carbon dioxide; petroleum refining; soaps and detergents; toilet preparations; textile chemicals; polishes and dressings.

Manufacturers:

Canadian Aniline & Extract Co.Ltd.
Carbide Chemicals Company.
Dow Chemical of Canada Limited.

MONOSODIUM GLUTAMATE

White crystalline powder.

Containers: cans or drums.

Uses: For enhancing natural food flavours; in soups, meat products.

Manufacturers:

H.L. Blachford Limited.
Industrial Grain Products Limited.

NAPHTHA, COAL TAR (Solvent Naphtha)

A water-white inflammable liquid when refined. Mixture of benzol, toluol and some xylol.

Uses: Manufacture rubber solvents; dry cleaning; general solvent.

Producers:

Algoma Steel Corporation Limited.
Dominion Steel & Coal Corporation Ltd.
Steel Company of Canada Limited.

NAPHTHA, PETROLEUM (Petroleum Ether, Benzene)

A water-white liquid recovered from light fractions in petroleum refining.

Grades for special purposes e.g. Stoddard solvent for dry cleaners; naphthas V.M. & P. for paint and lacquer thinners.

Uses: General solvent for oils, fats, rubber, etc.

Producers:

British American Oil Company, The.
Canadian Oil Companies Limited.
Imperial Oil Limited.
McColl Frontenac Oil Co. Limited.
Shell Oil Company of Canada Ltd.

NAPHTHENATE DRIERS

Cobalt, Lead, Calcium, Manganese Metallic Salts of naphthenic acid.

Uses: Mainly as driers in paints and varnishes; also in printing inks.

Manufacturer:

Nuodex Products of Canada Limited.

NIACIN (Nicotinic Acid)

Vitamin member of B group.

Grades: U.S.P. and Feed Grade.

Uses: Pharmaceutical; food; animal and poultry feeds.

Manufacturer:

Merck & Company Limited.

NICARBAZIN MIXTURE 25%

Potent coccidiostat.

Uses: In poultry feeds for the prevention of outbreaks of Coccidisosis in broilers and Flock Replacement Chicks.

Manufacturer:

Merck & Company Limited.

NICOTINIC ACID

See Niacin.

NITRIC ACID

A colourless or yellow, fuming, caustic and corrosive liquid.

Grades: Technical (various strengths); C.P.; Fuming.

Containers: glass bottles, carboys, drums and tank cars.

Uses: Manufacture of dyes, drugs, explosives, celluloid and nitrates; metallurgy; chemical industry; fertilizers.

Manufacturers:

Canadian Industries Limited.
Nichols Chemical Company Ltd, The.
North American Cyanamid Limited.

NITROBENZENE (Oil of Mirbane, Nitrobenzeol)

A poisonous, yellow, oily liquid, with an odour of bitter almond.

Grades: Technical and redistilled.

Containers: tins and drums.

Uses: Manufacture of aniline and a number of organic chemicals and intermediates for dyestuffs, shoe polishes; dust preventatives; for refining lubricating oils; manufacture pyroxylin compounds.

Manufacturer:

Naugatuck Chemicals, Division of Dominion Rubber Co. Ltd.

NONYL PHENOL

Almost water-white liquid.

Uses: In soaps and detergents; textile chemicals; rubber processing.

Manufacturers:

Canadian Aniline & Extract Co.Ltd.
Naugatuck Chemicals, Division of Dominion Rubber Co. Ltd.

OIL, BLOWN

Includes blown castor oil, blown rapeseed oil, blown fish oils.

Uses: Hydraulic brake fluids; lacquer manufacture; belt dressings; caulking compounds; barn paints; lubricating oils.

Manufacturers:

Nopco Chemical (Canada) 1955 Ltd.
Sherwin Williams Co. of Canada Limited.
Woburn Chemicals Limited.

OIL, CASTOR, BLOWN

Uses: Hydraulic brake fluids; lacquer manufacture; lubricating oils; plasticizers.

Manufacturers:

Toronto Elevators Limited.
Woburn Chemicals Limited.

OIL, CASTOR, DEHYDRATED

Uses: Drying oil for paints, varnishes and enamels.

Manufacturers:

Toronto Elevators Limited.
Woburn Chemicals Limited.

OIL, COD

Lowest grade of cod liver oil, generally obtained from sunrotted livers or from putrid or stale livers unfit for the production of cod liver oil.

Uses: In the tanning and treatment of leather; leather dressing; for production of sulphonated cod oil.

A considerable number of Producers.

OIL, COD LIVER

Various grades depending on freshness of livers from which oil is prepared and on vitamin A & D content. Medicinal Cod Liver Oil represents highest quality used for medicinal and nutritional purposes. Veterinary Cod Liver Oil used for poultry and animal feeding. Obtained mainly in Newfoundland and Eastern Canada.

A considerable number of Producers.

OIL, HERRING

Light yellow to reddish-brown oil expressed from herrings or herring offal. Main source of supply is coast of British Columbia.

Containers: drums, barrels, tank cars and ship's tanks.

Uses: For hydrogenation for subsequent use in the manufacture of soap; production of stearic and oleic acids and lubricating greases; for manufacture of shortening and cooking fats; feeding oils; insecticides; cutting oils; for sulphonation and for blown oils; paints.

Producers:

Anglo B.C. Packing Company Ltd.
British Columbia Packers Limited.
Canadian Fishing Company Limited, The.
Millerd, Francis & Company Limited.
Nelson Brothers Fisheries Limited.

OIL, LARD

Colourless or yellowish oil with peculiar odour and bland taste. Obtained by the cold pressing of lard.

Containers: wooden barrels.

Uses: Oiling of wool yarns in processing; metal cutting oils and compounds; lubricants; soap manufacture.

Producers:

S.F. Lawrason & Company Limited.
Nopco Chemical (Canada) 1955 Limited.
Wilsil Limited.

OIL, LINSEED (Flaxseed Oil)

Golden-yellow, amber or brown oil with peculiar odour. Thickens on exposure to air and becomes darkened in colour.

Various Grades: raw, boiled, double boiled, alkali refined.

Containers: tins, drums, barrels and tank cars.

Uses: In paints, varnishes, putty,

oilcloth and linoleum manufacture; artificial rubber; printing inks; adhesives; soaps; alkyd resins.

Producers:

Alberta Linseed Oil Company Ltd., The.
Canada Linseed Oil Mills Limited, The.
Hallet & Carey Limited.
Saskatchewan Co-Operative Producers Ltd.
Sherwin Williams Company of Canada Ltd.
Toronto Elevators Limited.

OIL, NEATSFOOT

A pale yellow, odourless oil obtained from feet and shin bones of cattle.

Containers: wooden barrels.

Uses: Manufacture lubricating composition; dressing, finishing, tanning, oiling, waterproofing and softening leathers; cutting oils; general waterproofing agent; oiling wool.

Producers:

S.F. Lawrason & Co. Ltd. (cold pressed).
Nopco Chemical (Canada) 1955 Ltd.
Most meat packing plants.

OIL, RAPESEED

Crude oil is reddish-brown in colour and pale yellow when refined. Obtained by the crushing of rape seed grown in Western Canada, principally in Saskatchewan.

Uses: Marine lubricating oils; extensively as an edible vegetable oil in European countries and Japan; in margarine and shortening but not so used on the North American Continent.

Producers:

Co-Op. Vegetable Oils Limited.
Hallet & Carey Limited.
Saskatchewan Co-Operatives Producers Ltd.

OIL, RED

See oleic acid.

OIL, SOYABEAN

Grades: crude, oxidized, refined, polymerized.

Uses: Margarine and shortening; paints and varnishes; alkyd resin manufacture; lubricating oils and greases; soaps and detergents.

Manufacturers:

Cdn. Vegetable Oil Processing Ltd.
Toronto Elevators Limited.
Victory Soya Mills Limited.

OILS, SULPHONATED

Derived from a variety of vegetable, animal and mineral oils by the action of strong sulphuric acid and subsequent refining. Pale yellow to dark brown, mobile liquids to semi-solids possessing remarkable wetting out and penetrating properties and are widely used in many industrial processes.

Uses: In textile industry; leather; pulp and paper; glue and adhesives; metal working; inks; insecticides and disinfectants; cutting oils; laundering and cleaning compositions, etc.

Manufacturers:

Canadian Aniline & Extract Co. Ltd.
Clough Chemical Company Ltd.
Dye & Chemical Co. of Canada Ltd.

Hart Products Co. of Canada Ltd.
Nopco Chemical (Canada) 1955 Ltd.
Quaker City Chemical Co. of Canada Ltd.
Richards Chemical Works Limited.
Scholler Bros. Limited.

OIL, TURKEY RED

Yellow to red, viscous oil made by sulphonating castor oil.

Grades: depend on moisture content.

Containers: kegs and barrels.

Uses: In textile industry; treatment and finishing leather.

Manufacturers:

See Oils, Sulphonated.

OIL, WHALE

Yellowish-brown oil with fishy odour obtained from the blubber of whales. Various grades depending on free fatty acid content and other impurities.

Containers: barrels.

Uses: Manufacturing soaps; lubricating oils and greases; leather finishing and dressing compositions; insecticides and agricultural sprays. When refined and hardened, used for shortening and margarine manufacture to a greater extent in Europe than in North America.

Producers:

Olsen Whaling & Sealing Ltd.
Polar Whaling Company Limited.
Western Whaling Corporation Ltd.

OLEIC ACIDS (Red Oil)

Yellowish or red, oily liquid which darkens on exposure to air.

Grades: Technical; U.S.P. or B.P.

Containers: bottles and drums.

Uses: Manufacture of oleates; special soaps; polishing compounds; pharmaceuticals; in glues and adhesives; inks; insecticides; textile chemicals; ore flotation.

Manufacturers:

Canada Packers Limited.
W.C. Hardesty Co. of Canada Ltd.
S.F. Lawrason and Company Limited.

PANCREATIN

Yellowish, amorphous powder obtained from the fresh pancreas of the hog or ox containing the enzymes, amylopsin, trypsin and steapsin.

Uses: Medicinal; also in leather tanning and desizing of textiles.

Manufacturer:

Fine Chemicals of Canada Limited.

PARAFFIN WAX

White, translucent, waxy, odourless solid prepared by the refining of paraffin scale, a by-product of petroleum refining.

Grades: various, depending on purity and melting point.

Uses: In preparation of waxed paper for bread, butter, and cereal wraps, etc.; candle manufacture; waterproofing wood, cork, matches; in pharmaceutical manufacture; floor polishes; dental waxes; shoe creams and polishes; insulation; fireworks; cosmetics; household canning, etc.

Manufacturers:

Imperial Oil Limited.
International Waxes Limited.
(micro-crystalline waxes)

PARATHYROID POWDER

Use: Medicinal.

Manufacturer:

Canada Packers Limited,
(Fine Chemicals Dept.)

PENICILLIN

Various strengths and forms, singly or in combination with streptomycin.

Uses: Human and veterinary medicine.

Manufacturers:

Ayerst, McKenna & Harrison Limited.
Connaught Medical Research Laboratories.
Merck & Company Limited.

PENICILLIN PROCAINE FEED SUPPLEMENTS

Various strengths.

Uses: As growth stimulant in animal and poultry feeds.

Manufacturer:

Merck & Company Limited.

PENTACHLOROPHENOL

White powder, insoluble in water but soluble in many organic solvents.

Uses: Fungicide; herbicide; wood preservative.

Manufacturer:

Dow Chemical of Canada Limited.

PENTAERYTHRITOL

Colourless crystals or white crystalline powder; odourless, sweet tasting, neutral and non-hygroscopic.

Grades: Technical.

Uses: Expanding applications in the manufacture of alkyl resins for the paint and varnish industry; in synthetic drying oils; air dry and baked metal finishes; raw material for the explosive, PETN.

Manufacturers:

Canadian Chemical Company Ltd.
St. Maurice Chemicals Limited.

PEPSIN

White or yellowish-white granules or powder. Contains a proteolytic enzyme.

Use: Medicine (as a digestive ferment); some chemical applications.

Manufacturer:

Canada Packers Limited
(Fine Chemicals Dept.)

PERCHLOROETHYLENE (Tetrachloroethylene)

Colourless liquid; non-flammable; non-explosive; ether-like odour; toxicity lower than that of most organic solvents; very stable and not decomposed by water or moisture.

Containers: iron drums and tank cars.

Uses: Solvent; dry-cleaning solvent; degreasing of metals.

Manufacturers:

Canadian Industries Limited.

Dow Chemical of Canada Limited.

PETROLEUM SULPHONATES

Metallic salts of oil soluble sulphonates made from polyalkylated benzene or from dodecyl benzene. A range of specialized products, each with specific applications.

Containers: cans or drums.

Uses: For adding to lubricating oils for automotive, aero and diesel engines to counteract corrosion; additives for cutting oils, serving as rust inhibitors; rust preventive additives for the production of preservative lubricants for metals and machinery in storage, tools, hardware, etc.; additives for marine engine lubricants; corrosion inhibitors for jet fuels.

Manufacturer:

Surpass Petrochemicals Limited.

PHENACETIN (Acetophenetidine)

White crystalline scales or powder with slightly bitter taste.

Grade: U.S.P. or B.P.

Uses: As an antipyretic and analgesic in pharmaceutical preparations.

Manufacturer:

Monsanto Canada Limited.

PHENOL (Carbolic Acid)

Colourless crystals or white crystalline mass when pure with distinctive odour. Reddens on exposure to air and light. Very poisonous. M.P. 42.5°C. Soluble in water, alcohol, chloroform and ether.

Containers: drums, carboys, barrels, and tank cars.

Uses: In the manufacture of organic chemicals and synthetic drugs; dyes; perfumes; synthetic resins and plastics; for germicides and disinfectants; pharmaceuticals and medicinals; toilet preparations; glues and adhesives; soaps and detergents.

Manufacturers:

B.A. - Shawinigan Limited.
Dominion Tar & Chemical Company Ltd.

PHENOL FORMALDEHYDE ADHESIVES

Uses: In the plywood and furniture industries.

Manufacturers:

American-Mariette Company of Canada Ltd.
Bakelite Company.
Monsanto Canada Limited.

PHENOL FORMALDEHYDE RESINS AND VARNISHES

Uses: Used by compounders and fabricators for glass and rockwool insulation; bondings for grinding wheels, automobile brake linings and linoleum; electrical insulation; surface coating materials; impregnates for paper and canvas for decorative and industrial laminates; basing cements for electric light bulbs; glues for structural timber; binders for foundry moulds, etc.

Manufacturers:

Bakelite Company,
Reichhold Chemicals (Canada) Ltd.
Schenectady Varnish Canada Ltd.

PHENOL MONOETHANOLAMINE

Use: Inhibitor in hydraulic fluids.

Manufacturer:

Canadian Aniline & Extract Company Ltd.

PHENOLSULPHONIC ACID

Uses: 70% acid for electrolyte in tin plating.

Manufacturer:

Canadian Aniline & Extract Company Ltd.

PHENOLIC LAMINATED AND IMPREGNATED MATERIALS

Uses: Available in sheet and tube form as well as fabricated parts. Produced to meet NEMA and military specifications. Modern fabricating facilities for finishing laminated parts machined to customer's specifications. A complete range of phenolic resin impregnated paper, fabric, asbestos and glass fibre cloth ready for hot pressing.

Manufacturer:

Bakelite Company.

PHENOLIC MOULDING MATERIALS

Uses: Marketed to manufacturers of electrical insulation, wiring devices, telephone handsets, radio and television cabinets, buttons, electrical switches and metering devices, bottle caps, radio condensers, household utensils and appliances.

Manufacturer:

Bakelite Company.

PHENYL DIETHANOLAMINE

Grey, crystalline solid.

Uses: Dyestuffs; organic synthesis.

Manufacturer:

Canadian Aniline & Extract Company Ltd.

PHOSPHORIC ACID

Clear, colourless liquid or crystalline solid, depending on concentration of solution and temperature.

Grades: C.P.; Food; Technical (various strengths).

Containers: bottles and drums.

Uses: Phosphates manufacture; pharmaceuticals; dyes; ceramics; sugar refining, in preparation of jellies, essences and soft drinks; pickling and rust proofing of iron; dental cements; textile finishing; manufacture of fertilizers; pharmaceuticals.

Manufacturers:

Consolidated Mining & Smelting Co. of Canada Ltd. (fertilizer grade solution 50% P_2O_5 only)
Electric Reduction Sales Company Ltd.

PHOSPHORUS (Two commercial allotropic forms)

Red Phosphorus

Dark red amorphous powder, less active than yellow phosphorus.

Uses: pyrotechnics; safety matches; organic synthesis; pesticides; smoke bombs, tracer bullets; in medicine; metal refining and processing.

Yellow Phosphorus

Light yellow, waxy solid with distinctive disagreeable odour. Exceedingly poisonous. Will take fire if exposed to air.

Uses: Manufacture of rodent poisons; phosphorus chemicals; for smoke screens; metal refining and processing.

Manufacturer:

Electric Reduction Sales Company Ltd.

PHOSPHORUS SESQUISULPHIDE

A dangerous, inflammable, pale yellow powder. A fire hazard.

Uses: In organic synthesis; manufacture of matches; in pyrotechnic manufacture.

Manufacturer:

Electric Reduction Sales Company Ltd.

PHTHALIC ANHYDRIDE

White, crystalline needles with characteristic odour.

Containers: bags.

Uses: Manufacture of alkyd resins and and phthalic esters, such as dibutyl phthalate; manufacture of certain dyestuffs and other organic chemicals.

Manufacturers:

Dominion Tar & Chemical Company.
Reichhold Chemicals (Canada) Limited.

PIGMENTS

Acetylene Black
Benzidine Yellows
Carbon Black
Chrome Greens
Chrome Yellows and Oranges
Hansa Yellow
Iron Oxides (Synthetic)
Lead Sulphate
Milori & Chinese Blue
Molybdate Oranges
Pyrazolone Red
Red Lead
Titanium Dioxide
Toluidine and Para Reds
White Lead
Zinc Chrome Yellow
Zinc Oxide

For each pigment see under alphabetical listing.

PLATINIC CHLORIDE

Red-brown crystals, soluble in water.

Uses: Laboratory reagent; in certain pharmaceuticals and medicinals; in petroleum refining (catalyst); chemical processing.

Manufacturer:

Johnson Matthey & Mallory Limited.

POLYESTER RESINS

Clear liquids which with the aid of a catalyst are rapidly converted to solids. Used primarily with glass fibres in the form of a mat or cloth to produce thermosetting reinforced plastics which are extremely strong and impact resistant. Chemically are condensation products prepared from polybasic acids and polyhydric alcohols.

Uses: For boat hulls; parts for aircraft; automobile and truck bodies and small structural shapes of all kinds.

Manufacturers:

Canadian General Electric Co. Ltd.
Naugatuck Chemicals, Division of Dominion Rubber Company Ltd.
Reichhold Chemicals (Canada) Limited.

POLYETHYLENE (Polythene)

A polymer of ethylene gas. The resin is a translucent, colourless, solid with a waxlike appearance and feel. Inert to most chemicals. Possesses high water resistance and impermeability to water vapour, toughness and flexibility at low temperatures, and outstanding electrical properties. Raw material supplied in the form of granules or small cubes. Can be extruded in sheets, films and many kinds of shapes.

Uses: Packaging (containers, wrapping); electrical insulation especially for wires and cables; housewares, acid and solvent resistant; tank and pipe linings; coatings; textile and bristles; moulded containers; films and sheeting.

Manufacturers:

Bakelite Company.
Canadian Industries Limited.

POLYETHYLENE GLYCOLS (CARBOWAX)

These compounds vary in physical form from liquids through semi-solid to hard waxes. Molecular weight from 200 to 20,000. Water soluble and heat stable.

Uses: As solvents, humectants and lubricants and intermediates for surfactants and synthetic resins; adhesives; inks; herbicides and pesticides; pharmaceuticals; polishes; toilet preparations; textile chemicals, soaps and detergents; mould lubricants in rubber industry.

Manufacturer:

Carbide Chemicals Company.

POLYSTYRENE

An important plastic or synthetic resin made by the polymerization of the hydrocarbon styrene. Water-white in colour, very tough with high electric insulating power, low water absorption and high mechanical strength.

Uses: Moulding by injection or casting for housewares, toys, radio cabinets, refrigerator parts, closures and packages; notions and novelties.

Manufacturers:

Dow Chemical of Canada Limited.
Monsanto Canada Limited.

POLYVINYL RESINS AND RELATED PRODUCTS

Monomeric Vinyl Acetate

A colourless, flammable liquid.

Containers: 45 Imperial gallon drums stabilized against polymerization.

Uses: For the manufacture of polyvynil acetate water emulsions used for water paints and adhesives; a copolymerizing agent with other monomers to give various properties to resins; as a chemical intermediate.

Manufacturer:

Canadian Resins & Chemicals Limited.

Polyvinyl Acetal Resins

Light straw flakes available in

various grades.

Containers: 50-lb. net multiwall paper bags or approximately 120-lb. in Leverpack kegs (at additional charge).

Uses: Special adhesives; moulding compositions (e.g. for phonograph records).

Manufacturer:

Canadian Resins & Chemicals Limited.

Polyvinyl Acetate Emulsions

White, milky liquids-suspensions of polyvinyl acetate resin particles in water, normally supplied with a solids content of 55%.

Containers: Heresite coated steel drums with removable lids, with a net content of approx. 490 lbs.

Uses: High strength adhesives, particularly in processes employing high speed automatic equipment; as vehicle in the manufacture of exterior and interior water paints; for textile sizes.

Manufacturer:

Canadian Resins & Chemicals Limited.

Polyvinyl Acetate Resins

Small granules or flakes available in several grades.

Containers: 50-lb. Multiwall paper bags or Leverpack kegs approximately 130-lb. net (at additional charge).

Uses: Adhesives; textile sizings; heat sealing coatings; inks.

Manufacturer:

Canadian Resins & Chemicals Limited.

Polyvinyl Chloride - Acetate Copolymer Resins.

Fine, white powder available in several grades.

Containers: 50-lb. net multiwall paper bags.

Uses: VYNW grade is used for the same purposes as the polyvinyl chloride resins listed above.

VYSL grade is especially designed for the manufacture of long-playing phonograph records and vinyl asbestos floor tile.

Manufacturer:

Canadian Resins & Chemicals Limited.

Polyvinyl Chloride Film and Sheeting

Supplied in thicknesses of 0.002" to over 0.020", widths up to 54" wide. Available in any colour, transparent, translucent, opaque, variety of finishes, textures and printed patterns.

Containers: Plain, printed and embossed film and sheeting is packed in a heavy cylindrical press board container or steel strapped corrugated carton. Net weight would vary, depending on width, gauge and finish, between 30 lbs. and 150 lbs. per container.

Uses: Inflatable toys; sporting goods; upholstery; nursery items; rainwear; drapes; etc.

Manufacturers:

Canadian Resins & Chemicals Limited.

Polyvinyl Chloride Moulding and Extrusion Compounds.

A series of compounds of varied

properties designed for such end uses as wire and cable insulation and general purpose moulding and extrusion.

Containers: 75 lb. net multiwall paper bags.

Uses: Extruded or moulded products such as wire and cable insulation, garden hose, tubing, profile shapes, belting; the moulding of resilient products, such as vacuum cleaner bumpers, handles, grommets, etc.

Manufacturer:

Canadian Resins and Chemicals Limited.

Polyvinyl Chloride Resins

Fine, white powder available in several grades.

Containers: 50-lb. net multiwall paper bags.

Uses: Raw materials for the manufacture of vinyl film and sheeting; extrusion compounds; moulding compounds.

Manufacturers:

Canadian Resins and Chemicals Limited.
Monsanto Canada Limited.

POTASSIUM ACID PHTHALATE

White, crystalline material.

Grade: Reagent only.

Use: Laboratory reagent.

Manufacturer:

Anachemia Chemicals Limited.

POTASSIUM BICHROMATE

Yellowish-red crystals.

Grade: Reagent.

Use: Laboratory reagent.

Manufacturer:

Anachemia Chemicals Limited.

POTASSIUM CHLORATE

White, crystalline powder. Very active oxidizing agent.

Grades: C.P.; Commercial.

Containers: metal drums.

Uses: Oxidizing agent; explosives; matches; pyrotechnics; dyes; disinfectant; pharmaceutical and toilet preparations; fur dressing; inks; manufacture paint pigments; printing and dyeing textiles.

Manufacture:

Electric Reduction Sales Company Ltd.

POTASSIUM CITRATE

A white odourless, granular material, with cooling saline taste.

Grades: B.P.; N.F. and Reagent.

Containers: kegs, barrels or bottles.

Uses: In pharmaceutical industry as a diuretic and alkalizer; analytical reagent.

Manufacturers:

Kemball Bishop & Co. (Canada) Ltd.
Merck and Company Limited.

POTASSIUM IODIDE

Colourless or white granules or powder.

Grades: U.S.P.; Reagent.

Uses: Photographic emulsions; animal and poultry feeds; analytical chemistry; pharmaceutical and medicinal products; special recording papers.

Manufacturers:

Mallinckrodt Chemical Works Ltd.
Merck & Company Limited.

POTASSIUM IODIDE - CALCIUM STEARATE MIXTURE

Fine, white powder.

Uses: For iodized free running salt; source of iodine in animal feeds and salt blocks.

Manufacturer:

Merck & Company Limited.

POTASSIUM OXALATE

Colourless, transparent crystals.

Uses: Medicine; removing stains from textiles; photography.

Manufacturer:

Anachemia Chemicals Limited.

n-PROPANOL (normal propyl alcohol)

Clear, water-white liquid with alcohol-like smell.

Uses: Solvent in paint, varnish and lacquer industry; brake fluids.

Manufacturer:

Canadian Chemical Company Limited.

PROPYL ACETATE (Normal)

Clear, colourless liquid with a pleasant odour.

Grade: Technical.

Containers: Cans and drums.

Uses: Toilet and cosmetic preparations; brake fluids; nitrocellulose lacquer solvent; solvent for natural and synthetic resins.

Manufacturer:

Canadian Chemical Company Limited.

PROPYLENE GLYCOL

A non-toxic, hygroscopic, viscous liquid with a slightly acrid taste. Readily miscible with water in all proportions.

Grades: U.S.P.; Technical.

Uses: In the preparation of foods, flavours, cosmetics and pharmaceuticals; softening and moistening agent; in tobacco, lotions, cold creams, permanent waving solutions, etc.; substitute for ethylene glycol and glycerine; inhibitor of fermentation and mould growth; antifreeze.

Manufacturers:

Canadian Chemical Company Limited.
Dow Chemical of Canada Limited.

PROPYLENE OXIDE

Colourless, volatile, flammable liquid with ethereal odour.

Uses: Processing of other chemicals;

nitrocellulose lacquer solvent; as a fumigant and insecticide.

Manufacturer:

Canadian Chemical Company Limited.

PYRAZOLONE RED

Uses: Colouring inks, paints, varnishes, lacquers, synthetic resins and plastics.

Manufacturers:

Brandram-Henderson Limited.
McArthur, Irwin, Limited.

QUASSIN SPECIAL

Fine, white powder.

Uses: Pharmaceutical products and alcohol denaturant.

Manufacturer:

Merck & Company Limited.

QUERCITIN

Yellow, crystalline material.

Use: In pharmaceuticals and medicinals.

Manufacturer:

Delmar Chemicals Limited.

QUICK LIME

See Calcium oxide.

RED LEAD

Bright red powder.

Containers: kegs, bags and barrels.

Uses: Storage battery manufacture; paints and varnish; glass; pottery; enamelling; rubber pigment.

Manufacturers:

Canada Metal Co. Limited.
McArthur, Irwin, Limited.
Sherwin Williams Company of Canada Ltd.

RENNIN

White powder or solution containing the active principle responsible for the curdling of milk.

Uses: Medicine; pharmaceuticals; in cheese making and other food processes.

Manufacturer:

Canada Packers Limited, (Fine Chemicals Dept.).

RESERPINE

Alkaloid prepared from Rauwolfia.

Uses: Medicinal; treatment of hypertension.

Manufacturer:

Fine Chemicals of Canada Limited.

RESORCINOL FORMALDEHYDE ADHESIVES

Use: Adhesives used in the plywood industry.

Manufacturers:

American-Marietta Company of Canada Limited.
Monsanto Canada Limited.

RIBOFLAVIN U.S.P. (Vitamin B 2)

Yellow powder.

Uses: Pharmaceutical Food enrichment or fortification; animal and poultry feeds.

Manufacturer:

Merck & Company Limited.

RUBBER ACCELERATORS

A complete line of rubber accelerators such as aldehyde amines, dithiocarbamates, thiazoles, thirams, xantates and activators.

Manufacturer:

Naugatuck Chemicals, Division of Dominion Rubber Co. Ltd.

RUBBER ANTIOXIDANTS

A complete range of rubber antioxidants.

Manufacturer:

Naugatuck Chemicals, Division of Dominion Rubber Co. Ltd.

RUTIN

Yellow, crystalline material. A glucoside.

Uses: Medicinal.

Manufacturer:

Fine Chemicals of Canada Limited.

SHELLAC, BLEACHED

Uses: Polishes and dressings; printing inks; wood finishing; floor polishes.

Manufacturers:

Commercial Alcohols Limited.
Temuss Products Canada Limited.

SILVER CYANIDE

A poisonous, white powder which darkens on exposure to light.

Uses: In electroplating; mirror manufacture.

Manufacturers:

Johnson Matthey & Mallory Limited.
Mallinckrodt Chemical Works Ltd.
Merck & Company Limited.

SILVER NITRATE

Very poisonous, colourless, transparent crystals.

Grades: C.P.; Reagent; Toughened sticks N F grade.

Uses: photography; manufacture of mirrors; electroplating; sympathetic and indelible inks; desinfectants; pharmaceutical preparations; important reagent in analytical chemistry.

Manufacturers:

Johnson Matthey & Mallory Limited.
Merck & Company Limited.

SODIUM ASCORBATE

Fine, white, crystalline powder.

Uses: Pharmaceutical; in preparation certain cured and smoked meats.

Manufacturer:

Merck & Company Limited.

SODIUM BENZOATE

Thin, white flakes or white powder.

Grades: U.S.P. or B.P.; Technical.

Containers: bottles and kegs.

Uses: As a preservative in foods, tobacco; medicinal and pharmaceutical preparations.

Manufacturer:

Monsanto Canada Limited.

SODIUM BICHROMATE

Red, deliquescent, crystalline material.

Grade: Reagent.

Use: Laboratory reagent.

Manufacturer:

Anachemia Chemicals Limited.

SODIUM CARBONATE (Soda Ash)

White to greyish-white powder or lumps available in a number of grades. Washing soda is sodium carbonate combined with ten molecules of water.

Containers: bottles, drums, barrels, and freight cars.

Uses: For glass manufacture; caustic soda and bicarbonate production; wide chemical applications where low cost alkali is required; pulp and paper industry; soap, washing compounds and detergents; water softening; in textile processing; petroleum refining; pharmaceutical products.

Manufacturer:

Brunner Mond (Canada) Limited.

SODIUM CARBOXYMETHYLCELLULOSE

White granules which form viscous solutions and tough flexible films. Viscosity of solution in water depends on particular composition. A valuable replacement for natural gums and starches.

Uses: In pharmaceutical industry as a thickening agent; toilet preparations; soaps and detergent compositions; glues and adhesives; textile warp sizing agent and finishing cottons and rayons; paper manufacture; paint industry; insecticide preparations; food products; tanning and leather dressing.

Manufacturers:

Canadian Industries Limited.
Chemical Developments of Canada Ltd.

SODIUM CHLORATE

Colourless crystals or white powder.

Grades: B.P. or U.S.P.; C.P.; Technical.

Uses: Manufacture of matches; paint pigments; explosive compositions; general oxidizing agent for chemical purposes; weed killer (extensive use); tanning and finishing leather; mordant in dyeing and printing textiles and furs; pharmaceuticals and toilet preparations; pulp and paper bleaching.

Manufacturer:

Electric Reduction Sales Company Ltd.

SODIUM CHLORIDE (Common Salt)

White, crystalline powder when purified.

Grades: C.P.; B.P.; Table Salt;

Technical; Rock Salt.

Uses: For manufacture of chemicals such as chlorine, caustic soda, sodium salts, hydrochloric acid, etc.; for ceramic glazes; refrigeration; meat packing, fish canning and curing; food preservation and table use; soap manufacture; leather manufacture; many miscellaneous uses.

Producers:

Canadian Salt Company Ltd.

SODIUM CHROMATE

Yellow crystalline product, soluble in water.

Uses: In leather tanning; production of other chromates; in inks.

Manufacturer:

Deloro Smelting & Refining Company Limited.

SODIUM CITRATE

An odourless, white, granular or crystalline powder, with cooling saline taste.

Grades: B.P.; U.S.P. VIII and XIV

Containers: kegs, barrels or bottles.

Uses: Pharmaceutically as blood and urinary alkalizer, anticoagulant and buffer; in foods as emulsifier in cheese; in beverages as flavour and carbonation improver; water treatment; tanning; plating.

Manufacturers:

Kemball Bishop & Co. (Canada) Ltd.
Merck & Company Limited.

SODIUM HYDROXIDE (Caustic Soda)

White, deliquescent pieces, lumps, flakes or sticks. Absorbs both carbon dioxide and water from the air. Available in form of aqueous solutions.

Grades: B.P. or U.S.P.; C.P. Reagent; Commercial. Various strengths sold depending on sodium oxide (Na_2O) content.

Containers: bottles, cans, drums, barrels and tank cars.

Uses: In the manufacture of many chemicals; in the production of rayon fibres; manufacture of regenerated cellulose transparent film; textile processing and finishing; in petroleum refining; in the production of pulp and paper; in soap and detergent manufacture; in the reclaiming of rubber; refining of vegetable oils, in ore dressing; metal refining and processing.

Manufacturers:

Canadian Industries Limited.
Dow Chemical of Canada Limited.
Shawinigan Chemicals Limited.
Standard Chemical Limited.
Western Chemicals Limited.

SODIUM HYPOSULPHITE (Sodium Thiosulphate, Hypo)

Colourless, odourless crystals or white granules. Efflorescent in warm dry air.

Uses: As antichlor in the bleaching of paper pulp; fixer in photography; as a mordant in dyeing and printing textiles; chrome tanning; in ore dressing; in viscose yarn production.

Manufacturer:

Canadian Industries Limited.

SODIUM IODIDE

White, crystalline substance.

Grades: U.S.P. and Reagent.

Uses: Pharmaceutical; Analytical Reagent.

Manufacturer:

Merck & Company Limited.

SODIUM PHOSPHATES

A number of salts of phosphoric acid exist, all with varying properties, depending on how many of the three available hydrogen atoms are placed by bases.

Acid Sodium Pyrophosphate

Colourless, transparent crystals or white granules; efflorescent in dry air.

Uses: In baking products; dairy industry; in electro-deposition of metals; petroleum refining, oil well drilling muds; pulp and paper industry (pitch control).

Disodium Phosphate

Colourless crystals or white granules, readily losing water of crystallization on exposure to air.

Uses: As a mordant in dyeing; cheese manufacture; sugar refining; pulp and paper industry; manufacture of ceramic enamels; water treatment; pigment manufacture.

Monosodium Phosphate

White, odourless, slightly deliquescent crystals or granules, freely soluble in water.

Uses: baking powders; boiler water treatment; dairy industry; food products; pharmaceuticals; metal treatment.

Sodium Hexametaphosphate

A polyphosphate glass available as clear, white flakes or in a ground form.

Uses: In preparation of detergent composition; water softening and boilet water treatment; dispersal of clay slips; pulp and paper industry; in oil well drilling muds.

Sodium Tripolyphosphate

Uses: Soaps and detergent comsositions; tanning; textile industry; pulp and paper industry; petroleum refining; metal refining and processing; water treatment; ceramics; viscosity control in cement slurries and in paper coating clays.

Tetrasodium Pyrophosphate

Colourless, transparent crystals, soluble in water.

Uses: In soap and detergent compositions; metal refining and processing; the textile industry; toilet preparations; ceramic processing; water treatment; dairy industry; pulp and paper; petroleum refining.

Trisodium Phosphate

White crystalline material.

Uses: soaps and detergents; dishwashing compounds; textile industry; sugar refining; food industry; water treatment; metal cleaner.

Manufacturer:

(All Forms of Phosphates)
Electric Reduction Sales Company Limited.

SODIUM PROPIONATE

Fine, white powder.

Grades: U.S.P. and Food Grade.

Uses: Mold and rope preventative in bread and cakes; cheese preservative, fungicide, veterinary medicine.

Manufacturer:

Merck & Company Limited.

SODIUM SILICATES

A variety of sodium silicates are manufactured and sold commercially. Products vary from those containing 1 molecule Na_2O to 2 molecules $Si\ O_2$ (water glass) to those containing 2 molecules Na_2O to 1 molecule Si_2O (sodium orthosilicate). They are crystalline or powdered products, available also as solutions.

Containers: bottles, drums, barrels, and bags.

Uses: In detergent and metal cleaning compositions; in adhesives; sizings and coatings; manufacture of silica gel and many miscellaneous uses.

Manufacturer:

National Silicates Limited.

SODIUM STEARATE

White powder, with soapy feel having a tallow like odour.

Grades: U.S.P.; B.P.; Technical.

Uses: Toilet preparations; waterproofing agent; paint suspension agent.

Manufacturer:

Mallinckrodt Chemical Works Ltd.

SODIUM SULPHATE (Salt Cake)

White, greyish-white powder. Canadian production mainly from alkali lakes in Saskatchewan.

Uses: In sulphate pulp manufacture; in glass making; soap and detergent compositions; ceramic glazes.

Producers:

(Synthetic Product)
Canadian Industries Limited.
(Natural Product)
Midwest Chemicals Limited.
Natural Sodium Products Limited.
Saskatchewan Minerals.
(Sodium Sulphate Division)
Sybouts Sodium Sulphate Company.

SODIUM SULPHITE

White crystals or powder.

Uses: In dyestuffs and intermediate production; in textile processing; chemical reducing agent; food preservative; photography; engraving and lithography; pulp and paper processing; ore dressing.

Manufacturer:

Canadian Industries Limited.

SOLVENTS, SPECIAL

C.C.S. 203 (n-Butanol and higher alcohols)

For nitrocellulose lacquers and thinners; brake fluids; alkyl resin formulations; in herbicides and pesticides; glues and adhesives.

C.C.S. 301 (A blend of secondary

butyl alcohol and propyl alcohol)

For lacquers and thinners; component of brake fluids; synthetic resin solvent; in adhesives; herbicides and pesticides.

C.C.S. 601 (Principally mixed Ketones)

Useful solvent in paint and lacquer industry; for nitrocellulose and vinyl formulations; tanning and leather dressings.

C.C.S. 901 (Mixed amyl and hexyl alcohols)

Solvent in paint, varnish and lacquer industry.

Manufacturer:

Canadian Chemical Company Ltd.

STEARIC ACIDS (Pressed and hydrogenated types)

Colourless, odourless, wax-like solid or beads.

Grades: Various grades depending on stearic acid and oleic acid content, e.g. single pressed; double pressed; triple pressed; also U.S.P. and B.P.; distilled.

Containers: bottles, cans, cartons and drums.

Uses: Manufacture of candles; metallic stearates; in pharmaceuticals and cosmetics; rubber compounding; soaps; polishes; adhesives; tanning and leather dressing; textile chemicals.

Manufacturers:

Canada Packers Limited.
W.C. Hardesty Co. of Canada Ltd.
S.F. Lawrason and Company Ltd.

STREPTOMYCIN

Various strengths and forms and mixtures, or in combination with penicillin.

Uses: Human medicine; veterinary medicine; animal and poultry feeds.

Manufacturer:

Merck & Company Limited.

STYRENE MONOMER

A colourless, oily liquid with an aromatic odour. Readily polymerizes when heated or in the presence of a catalyst to a clear, colourless solid.

Containers: drums or tanks.

Uses: An important raw material for the manufacture of synthetic rubber and for the production of polystyrene synthetic resins.

Manufacturers:

Dow Chemical of Canada Limited.
Polymer Corporation Limited.

SULFACETAMIDE and DERIVATIVES (N- Acetylsulfanilamide)

Crystalline compound for the use of laboratories manufacturing tablets for intestinal infections.

Manufacturers:

Delmar Chemicals Limited.
Fine Chemicals of Canada Ltd.

SULFAQUINOXALINE - VETERINARY

Fine, white powder.

Uses: For control or prevention of

outbreaks of coccidosis in fowl.

Manufacturer:

Merck & Company Limited.

SULFATHIAZOLE

One of the sulphur drugs.

Use: In pharmaceutical preparations.

Manufacturer:

Mansanto Canada Limited.

SULPHAMETHAZINE and SODIUM SULPHAMETHAZINE

Crystalline organic compound.

Uses: In medical and veterinary preparations for treatment of infections caused by bacteria.

Manufacturer:

Naugatuck Chemicals, Division of Dominion Rubber Company.

SULPHATED FATTY ALCOHOLS

Wetting agents and detergents.

Uses: In insecticides, fungicides and disinfectants; toilet preparations; textile processing and finishing.

Manufacturer:

Canadian Aniline & Extract Co. Ltd.

SULPHUR

Yellow material in lump or powder form. Burns readily forming choking fumes of sulphur dioxide gas.

Containers: bags or loose in cars.

Uses: In the production of sulphur dioxide for the manufacture of sulphuric acid and for the preparation of bisulphite liquors used in the production of sulphite pulp; in gunpowder and pyrotechnics; matches; vulcanization of rubber; production of sulphur dioxide for bleaching, fumigation and preserving; in lime-sulphur and other agricultural insecticides and dusts; many minor uses.

Sulphur has not yet been found in the naturally occuring form in Canada and most of the requirements are imported.

Since 1953, however, there has been a small production of elemental sulphur in Canada from pyrites and from natural gas. Currently, about 20,000 tons per annum is obtained from iron pyrites at Port Robinson, Ontario, by a process developed by Noranda Mines Limited. About 50,000 tons per annum elemental sulphur is also recovered from the purification of natural gas in Alberta in plants operated by

Royalite Oil Company Limited, Okotoks, Alberta.

Shell Oil Company Limited, Jumping Pound, Alberta.

Most of the Alberta sulphur supplies the domestic demand in Western Canada and comparatively little is available for export. However much of the natural gas in Alberta and Northern British Columbia, which, in the next two or three years, will be fed into the Trans-Canada and West Coast Transmission pipe lines, will have to be purified and elemental sulphur produced in the process.

Two such sulphur recovery plants are already projected, one at Pincher Creek in Southern Alberta and the other at Fort St. John, B.C., near the B.C.- Alberta border. By the end of 1957, these plants are expected to produce sulphur at the rate of 200,000 tons per annum and within five years, it is estimated this

production will be tripled. Much of this sulphur will be available for export.

SULPHUR DIOXIDE

Colourless gas with a very irritating smell. Soluble in water forming sulphurous acid. Readily condensed to a liquid under pressure at normal temperatures.

Containers: Shipped as liquid under pressure in cylinders or special tank cars.

Uses: In production of sulphite pulp; preservative for fruits; metal processing and refining; processing of other chemicals.

Producers:

Canadian Industries Limited.

SULPHURIC ACID (Oil of Vitriol)

Colourless to dark brown oily liquid.

Grades: Commercial (various strength solutions); Oleum (various strengths); Fuming Sulphuric; U.S.P. or B.P.; C.P.; Technical.

Containers: bottles, carboys, drums and tank cars.

Uses: Manufacture of inorganic or organic acids; sulphates of metals; salt cake; synthetic drugs and perfumes; dyestuffs; explosives and propellants; fatty acids, soaps, glucose and sugar refining; sulphonating agent; pickling agent for iron and steel; in metallurgical operations; storage batteries; refining precious metals; electroplating, refining of copper; tar refining; refining crude oils and petroleum products; textile processing and finishing.

Manufacturers:

Aluminum Company of Canada Limited.
Canadian Industries Limited.
Consolidated Mining & Smelting Co. of Canada Ltd.
Nichols Chemical Company Ltd, The.
North American Cyanamide Ltd.

SUPERPHOSPHATE (Calcium Acid Phosphate)

Fertilizer made by the action of sulphuric acid on phosphate rock.

Containers: bags and carlots.

Uses: Agricultural fertilizer and fertilizer mixtures.

Manufacturer:

Canadian Industries Limited.

SYNTHETIC RUBBER

Three main types are made in Canada. In each type are several formulations with specific applications.

Butyl Type

A butyl polymer with excellent resistance to oxidation.

Uses: Wire and cable insulation; inner tubes; conveyor and transmission belts; automotive parts such as bumpers, heater hose, light gaskets, grommets, weather stripping; protective clothing (anti-gas); hospital sheeting; tank linings.

Containers: Butyl rubbers are shipped in cans, containing 65-70 lbs. of products. All other rubbers are packaged in paper bags with a burlap overbag. Each bale weighs approximately 80 lbs.

N. Type

A butadiene-acrylonitrile rubber with oil resistant properties.

Uses: Mechanical goods, where resistance to oils, gasoline, greases, is required, such as oil seals, gaskets, self-sealing jet fuel tanks, gasoline hose, grommets. Rolls for paper and printing machinery; brake linings; conveyor and transmission belts; adhesives.

S. Type

The standard general purpose butadiene-styrene rubber.

Uses: Wire and cable insulation; waterproof footwear; rubber heels and soles; tires, camel back (for recapping tires); conveyor and transmission belts; rubber floor tile; film and proofed goods; rubber adhesives; mechanical goods such as sheeting, hose, wringer rolls, battery boxes, jar rings, sponge rubber sheet, rug under-cushion and packing.
S. type is also supplied in Latex form.

Manufacturer:

Polymer Corporation Limited.

THEOPHYLLINE DERIVATIVES

Usually white powders or crystalline products.

Uses: Medicinal.

Manufacturer:

Fine Chemicals of Canada Limited.

THIAMINE HYDROCHLORIDE U S P
THIAMINE MONONITRATE

Fine, white, crystalline powder.

Uses: Pharmaceutical; enrichment of foods.

Manufacturer:

Merck & Company Limited.

THIRAM (Tetramethylthiram Disulphide)

White crystals, soluble in most organic solvents but insoluble in water, dilute caustic or gasoline.

Use: Seed disinfectant and fungicide.

Manufacturer:

Naugatuck Chemicals, Division of Dominion Rubber Company Ltd.

THYMOL IODIDE N F

Reddish-brown, bulky powder. Gives off iodine vapours when heated above 100°.

Uses: Medicinal; antiseptic dusting powder.

Manufacturer:

Mallinckrodt Chemical Works Limited.

TITANIUM DIOXIDE

Finely-divided, white pigment consisting of upwards of 95% titanium oxide. A variety of grades are available for particular applications.

Uses: As a prime hiding pigment in paints, paper, rubber, plastics, inks, linoleum, etc.

Manufacturer:

Canadian Titanium Pigments Limited.

TOLUIDINE AND PARA REDS (All shades)

Uses: Colouring inks, paints,

varnishes and lacquers, plastics and synthetic resins.

Manufacturers:

Brandram-Henderson Limited.
McArthur, Irwin, Limited.

TRICHLOROETHYLENE

Low-boiling, colourless, heavy liquid with chloroform-like smell and toxic vapours. Non-inflammable, non-explosive and non-combustible.

Containers: iron drums, tank trucks, and tank cars.

Uses: good solvent for crude rubber, dyes, bitumen, pitch, oils, fats, waxes, tar, gums and resins; metal degreasing; dry cleaning solvent; paint and varnish remover.

Manufacturers:

Canadian Industries Limited.
Dow Chemical of Canada Limited.

TRIETHANOLAMINE

Oily, colourless or slightly yellow liquid, with an ammonia odour. The technical grade is a mixture of triethanolamine, diethanolamine and monoethanolamine.

Uses: Preparation of dry cleaning soaps; manufacture of emulsions and cosmetic soaps; increasing dispersion of dyestuffs; manufacture of synthetic resins; herbicides and pesticides; cutting oils.

Manufacturers:

Canadian Aniline & Extract Company Ltd.
Carbide Chemicals Company.
Dow Chemical of Canada Limited.

TRIETHYLENE GLYCOL

Colourless, hygroscopic liquid similar in properties to diethylene glycol.

Containers: cans and drums.

Uses: Solvent for nitrocellulose, gums and resins; lacquers; glues and adhesives; inks; air sanitation vaporizers.

Manufacturers:

Carbide Chemicals Company.
Dow Chemical of Canada Limited.

UREA FORMALDEHYDE ADHESIVES

Uses: Mainly in the plywood industry.

Manufacturers:

American-Marietta Company of Canada Ltd.
Monsanto Canada Limited.

VANILLIN (Derived from Waste Sulphite Liquor)

White or very slightly yellow, crystalline material with pleasant aromatic odour and taste.

Uses: As a flavouring agent in confectionery, beverages, food products; pharmaceuticals.

Manufacturers:

Howard Smith Paper Mills Limited.
Ontario Paper Company Limited.

VITAMINS

Vitamin B 1 (See thiamine hydrochloride and thiamine mononitrate)

Vitamin B 2 (See Riboflavin)

Vitamin B 4 (See Calcium Pantothenate)

Vitamin B 12 (See Cyanocobalamin)

Vitamin C (See Ascorbic Acid)

Manufacturer:

Merck & Company Ltd.

Vitamin D 2

Vitamin D 3

Manufacturer:

Canada Packers Limited.
(Fine Chemicals Dept.)

WHEAT DEXTRINES

Uses: adhesive industry; textile processing and finishing.

Manufacturer:

Industrial Grain Products Limited.

WHEAT STARCHES

White powder.

Uses: Sizing of paper; in the finishing of textiles; in the manufacture of food products; glues and adhesives; explosives manufacture; beverage industry; laundry starches; metal refining and processing; pharmaceutical industry.

Manufacturer:

Industrial Grain Products Limited.

WHITE LEAD (Basic Sulphate)

Uses: In paing industry.

Manufacturer:

McArthur, Irwin, Limited.

WHITE LEAD (Carbonate)

A poisonous, white amorphous powder.

Containers: kegs or barrels.

Uses: Paint pigment; putty; ceramic glazes.

Manufacturers:

Carter White Lead Company Ltd.
McArthur, Irwin, Limited.

XYLENOL

White, crystalline solid.

Uses: Disinfectants; synthetic resin industry; processing of other chemicals.

Manufacturer:

Dominion Tar & Chemical Company Ltd.

ZINC CHLORIDE

Solution only. Poisonous. Also chromated zinc chloride.

Uses: Wood preservative; ingredient of soldering fluxes; electroplating; disinfectant, antiseptic and deodorant preparations; in textile processing; cold water glues and other adhesives; special cements; petroleum refining; pharmaceutical and cosmetic preparations.

Manufacturer:

Canadian Industries Limited.

ZINC NAPHTHENATE

Soft tan solid or liquid, depending on zinc content.

Uses: Preservation of wood; waterproofing and preservative textiles,

rope, etc.; paint drier.

Manufacturer:

Nuodex Products of Canada Limited.

ZINC OXIDE

White or yellowish-white, amorphous powder.

Grades: B.P. or U.S.P.; C.P.; Technical; Leaded.

Containers: bags, barrels and drums.

Uses: Paint pigment; manufacture of zinc salts; accelerator; activator in rubber manufacture; ceramic glazes and enamels; linoleum pigment; dental cements; pharmaceutical and cosmetic preparations.

Manufacturers:

Durham Industries (Canada) Limited.
Zinc Oxide Company of Canada Limited.

ZINC RESINATE

Light brown, amorphous powder.

Uses: In certain paints and inks.

Manufacturer:

H.L. Blachford Limited.

ZINC SELENATE

Use: In the glass industry.

Manufacturer:

Anachemia Chemicals Limited.

ZINC STEARATE

White, fine, soft, bulky powder.

Grades: U.S.P.; Technical.

Uses: In cosmetics and pharmaceutical powders and ointments; in paints and lacquers, crayons, oil cloths and linoleum.

Manufacturers:

H.L. Blachford Limited.
Mallinckrodt Chemicals Works Limited.

ZINC YELLOW CHROME C.P.

Greenish-yellow pigment.

Uses: for certain types of paints, lacquers and primers.

Manufacturers:

Brandram-Henderson Limited.
McArthur, Irwin, Limited.

PART III

ADDRESSES OF MANUFACTURERS OF CHEMICALS AND ALLIED PRODUCTS INCLUDED IN CANADIAN CHEMICALS FOR EXPORT

Alberta Distillers Limited,
14th St. and 34th Ave., S.E.,
Calgary, Alberta.

Alberta Linseed Company Limited, The.
Box 510,
Medicine Hat, Alberta.

Algoma Steel Corporation Limited,
Sault Ste. Marie, Ontario.

Aluminum Company of Canada Limited,
Chemicals Division,
1700 Sun Life Building,
Montreal, P.Q.

American-Marietta Company of Canada Limited,
Foot of Keary Street,
New Westminster, B.C.

Anachemia Chemicals Limited,
500 Second Avenue,
Ville St. Pierre,
Montreal 32, P.Q.

Anglo B.C. Packing Company, The
926 West Pender Street,
Vancouver 1, B.C.

Ayerst, McKenna & Harrison Ltd.,
Box 6115,
Montreal 9, P.Q.

Bakelite Company,
Division of Union Carbide Canada Ltd.,
P.O. Box 395,
Belleville, Ontario.

B.A.-Shawinigan Limited,
11001 St. Catherine St. E.,
(P.O. Box 338),
Montreal 5, P.Q.

H.L. Blachford Limited,
977 Aqueduct Street,
Montreal 3, P.Q.

Brandram-Henderson Limited,
6684 St. Urbain Street,
Montreal 14, P.Q.

British American Oil Company, The
800 Bay Street,
Toronto 5, Ontario.

British Columbia Distillery Company Limited,
355 Burrard Street,
Vancouver 1, B.C.

British Columbia Packers Limited,
Foot of Campbell Avenue,
Vancouver 4, B.C.

Brunner Mond Canada Sales Ltd.,
1016 New Birks Building,
620 Cathcart Street,
Montreal 2, P.Q.

Cabot Carbon of Canada Limited,
170 Bay Street,
Toronto, Ontario.

Calvert Distillers Limited,
Amherstburg, Ontario.

Canada Linseed Oil Mills Ltd., The
2215 Notre Dame Street E.,
Montreal 24, P.Q.

Canada Metal Co. Limited, The
721 Eastern Avenue,
Toronto 8, Ontario.

Canada Parkers Limited,
Foreign Trade Division,
2200 St. Clair Ave. W.,
Toronto 9, Ontario.

Canadian Aniline & Extract Company Limited,
162 Ward Avenue,
Hamilton, Ontario.

Canadian Bronze Powder Works Ltd.,
751-759 Victoria Square,
Montreal 1, P.Q.

Canadian Chemical Company Limited,
2035 Guy Street,
Montreal 25, P.Q.

Canadian Copper Refiners Limited,
1709 Bank of Nova Scotia Bldg.,
44 King Street W.,
Toronto 1, Ontario.

Canadian Fishing Company Ltd., The
Foot of Gore Avenue,
Vancouver 4, B.C.

Canadian General Electric Co. Ltd.,
212 King Street W.,
Toronto 1, Ontario.

Canadian Industrial Alcohols & Chemicals Limited,
1201 Sherbrooke Street W.,
Montreal 2, P.Q.

Canadian Industrial Minerals Ltd.,
Room 1220,
67 Yonge Street,
Toronto 1, Ontario.

Canadian Industries Limited,
1253 McGill College Avenue,
(P.O. Box 10),
Montreal, P.Q.

Canadian Lecithin Company Limited,
60 Front Street W.,
Toronto 1, Ontario.

Canadian Oil Companies Limited,
204 Richmond Street W.,
Toronto 1, Ontario.

Canadian Resins & Chemicals Ltd.,
600 Dorchester Street, W.,
Montreal, P.Q.

Canadian Salt Company Limited,
625 Dorchester Street, W.,
Montreal, P.Q.

Canadian Titanium Pigments Limited,
630 Dorchester Street, W.,
Montreal, P.Q.

Canadian Vegetable Oil Processing Ltd.,
Victoria Ave. and Burlington St.,
Hamilton, Ontario.

Carbide Chemicals Company,
Division of Union Carbide Canada Limited,
1425 Mountain Street,
Montreal 25, P.Q.

Carter White Lead Company of Canada Ltd.,
1295 Delormier Avenue,
Montreal 24, P.Q.

Chemical Developments of Canada Limited,
420 Lagauchetiere St. W.,
Montreal 1, P.Q.

Chipman Chemicals Limited,
519 Parkdale Avenue, North,
Hamilton, Ontario.

Clough Chemical Company Ltd.,
1375 Cote Vertu,
St. Laurent,
Montreal 9, P.Q.

Colgate - Palmolive Limited,
64 Colgate Avenue,
Toronto 8, Ontario.

Columbia Southern Chemical Corporation,
420 Dominion Square Bldg.,
Montreal, P.Q.

Commercial Alcohols Limited,
3176 Notre Dame Street E.,
Montreal 4, P.Q.

Consolidated Mining & Smelting Company of Canada Limited,
215 St. James Street, W.,
Montreal, P.Q.

Connaught Medical Research Laboratories,
University of Toronto,
Spadina Crescent,
Toronto 4, Ontario.

Co-operative Vegetable Oils Limited,
(P.O. Box 150),
Altona, Manitoba.

Corby H. Distillery Limited,
1201 Sherbrooke St. W.,
(P.O. Box 308, Station "B"),
Montreal, P.Q.

Cornwall Chemicals Limited,
Division of Canadian Industries Ltd.,
1253 McGill College Avenue,
Montreal 1, P.Q.

Cosmos Chemical Company Limited,
117 Cavan Street,
Port Hope, Ontario.

Delmar Chemicals Limited,
50 Victoria Street, Lachine,
Montreal 32, P.Q.

Deloro Smelting & Refining Co. Ltd.,
Deloro, Ontario.

Distillers Corporation Limited,
1430 Peel Street,
Ville LaSalle,
Montreal, P.Q.

Dominion Steel & Coal Corp. Ltd.,
624 Canada Cement Building,
Phillips Square,
Montreal, P.Q.

Dominion Tar & Chemical Co. Ltd.,
640 Cathcart Street,
Montreal, P.Q.

Dow Chemical of Canada Limited,
600 University Avenue,
Toronto 2, Ontario.

DuPont Company of Canada Limited,
1135 Beaver Hall Hill,
(Box 660),
Montreal, P.Q.

Durham Industries (Canada) Ltd.,
1435 Island Street,
Montreal 22, P.Q.

Dye & Chemical Company of Canada Ltd.,
P.O. Box 176,
Kingston, Ontario.

Electric Reduction Sales Company Ltd.,
137 Wellington Street, W.,
Toronto, Ontario.

Excelsior Refineries Limited,
222 Tegler Building,
Edmonton, Alberta.

Fine Chemicals of Canada Ltd.,
124 Pharmacy Avenue,
Toronto 13, Ontario.

Gooderham & Worts Limited,
2 Trinity Street,
(P.O. Box 372 Terminal A),
Toronto, Ontario.

Hallet & Carey Limited,
830 Archibald Street,
St. Boniface, Manitoba.

Hamilton By-Product Coke Ovens Limited,
82 King Street E.,
Hamilton, Ontario.

W.C. Hardesty Company of Canada Limited,
975 Lakeshore Road,
(P.O. Box 90, Station N),
Toronto 14, Ontario.

Hart Products Company of Canada Limited,
Victoria Road,
(P.O. Box 146),
Guelph, Ontario.

Howards & Sons (Canada) Ltd.,
247 Dunbar Avenue,
Montreal 16, P.Q.

Husky Oil & Refining Limited,
815 - 6th Street W.,
Calgary, Alberta.

Imperial Oil Limited,
56 Church Street,
Toronto 1, Ontario.

Industrial Grain Products Limited,
Starch & Chemical Division of The Ogilvie Flour Mills Co. Ltd.,
P.O. Box 6089,
Montreal, P.Q.

International Waxes Limited,
Agincourt, Ontario.

Johnson Matthey & Mallory Limited,
110 Industry Street,
Mount Dennis,
Toronto 15, Ontario.

Kemball, Bishop & Co. (Canada) Ltd.,
P.O. Box 7,
Cornwall, Ontario.

S.F. Lawrason & Company Limited,
639 Nelson Street,
(P.O. Box 996),
London, Ontario.

Lecithin Products (Canada) Limited,
48 Dundas Street W.,
(P.O. Box 38),
Belleville, Ontario.

Lever Bros. Limited,
299 Eastern Avenue,
Toronto 8, Ontario.

Lignosol Chemicals Limited,
P.O. Box 2025,
Quebec, P.Q.

Mallinckrodt Chemicals Works Limited,
378 St. Paul Street W.,
Montreal 1, P.Q.

McArthur, Irwin, Limited,
7 Bates Road,
Outremont,
Montreal 8, P.Q.

McColl-Frontenac Oil Company Limited,
McColl-Frontenac Building,
1425 Mountain Street,
Montreal 25, P.Q.

Merck & Company Limited,
560 De Courcelles Street,
(P.O. Box 899),
Montreal 30, P.Q.

Midwest Chemicals Limited,
P.O. Box 446,
Edmonton, Alberta.

Millerd Francis & Company Ltd.,
Cypress Park W.,
Vancouver, B.C.

Monsanto Canada Limited,
425 St. Patrick Street,
Ville La Salle, (P.O. Box 900),
Montreal 32, P.Q.

Montreal Coke & Manufacturing Co.,
435 St. Patrick Street,
Ville La Salle, (P.O. Box 600),
Montreal 32, P.Q.

Montreal Products Company Ltd.,
1410 Montmorency Street,
Montreal, P.Q.

National Silicates Limited,
P.O. Box 69,
New Toronto,
Toronto 14, Ontario.

Natural Sodium Products Ltd.,
Bishopric, Saskatchewan.

Naugatuck Chemicals,
Division of Dominion Rubber Company
Limited,
Elmira, Ontario.

Nelson Bros. Fisheries Limited,
325 Howe Street,
Vancouver 1, B.C.

Niagara Brand Spray Company Ltd.,
Burlington, Ontario.

Nichols Chemical Company Ltd., The
1917 Sun Life Building,
Montreal, P.Q.

Nopco Chemical (Canada) 1955 Ltd.,
123 St. George Street,
(P.O. Box 68),
London, Ontario.

North American Cyanamid Limited,
160 Bloor Street E.,
Toronto, Ontario.

Northern Pigment Company Limited,
(P.O. Box 1),
New Toronto, Ontario.

Northwest Nitro-Chemicals Limited,
Exclusive Sales Agents,
Harrisons & Crosfield (Canada) Ltd.,
137 Wellington Street W.,
Toronto, Ontario.

Nuodex Products of Canada Limited,
34 Industrial Street,
Leaside,
Toronto 17, Ontario.

Olsen Whaling & Sealing Limited,
P.O. Box 5,
St. John's, Newfoundland.

Ontario Paper Company Limited,
Allanburg Road,
Thorold, Ontario.

Pembina Mountain Clays Limited,
945 Logan Avenue,
Winnipeg 3, Manitoba.

Polar Whaling Company Limited,
Harbour Grace, Newfoundland.

Polymer Corporation Limited,
Sarnia, Ontario.

Proctor & Gamble Company of Canada Limited, The
1320 Yonge Street,
(P.O. Box 355, Terminal A),
Toronto, Ontario.

Quaker City Chemical Company of Canada Limited,
Birmingham & Whitfield Ave.,
Hamilton, Ontario.

Reichhold Chemicals (Canada) Limited,
1919 Wilson Avenue,
Weston,
Toronto 15, Ontario.

Richards Chemical Works Limited,
178 St. Peter Street,
St. Johns, P.Q.

St. Maurice Chemicals Limited,
600 Dorchester Street W.,
Montreal 2, P.Q.

Saskatchewan Co-operative Producers Limited,
Saskatoon, Saskatchewan.
Export Agents - Interprovincial Co-operatives Limited,
144 Lombard Avenue,
Winnipeg, Manitoba.

Saskatchewan Minerals,
Sodium Sulphate Division,
Chaplin, Saskatchewan.

Schenectady Varnish Canada Limited,
409 Comstock Road, Scarborough,
Toronto, Ontario.

Scholler Bros. Ltd.,
Welland Ave. and Vine St.,
St. Catherines, Ontario.

Shawinigan Chemicals Limited,
600 Dorchester Street W.,
Montreal, P.Q.

Shell Oil Company of Canada Ltd.,
(Chemical Division),
25 Adelaide Street, E.,
Toronto 1, Ontario.

Sherritt Gordon Mines Limited,
(Chemical Metallurgical Division),
Fort Saskatchewan, Alberta.
Exclusive Sales Agents:
Harrisons & Crosfield (Canada) Ltd.,
137 Wellington Street W.,
Toronto, Ontario.

Sherwin Williams Company of Canada Limited,
2875 Centre Street,
(P.O. Box 489),
Montreal, P.Q.

Howard Smith Paper Mills Ltd.,
Export Agents:
W.J. Bush & Company (Canada) Ltd.,
312 St. Patrick Street,
Ville LaSalle, P.Q.

Standard Chemical Limited,
Room 420,
Dominion Square Building,
1010 St. Catherine Street W.,
Montreal 2, P.Q.

Standard Oil Company of British Columbia Limited,
833 Marine Building,
Vancouver 1, B.C.

Steel Company of Canada Ltd., The
Wilcox Street,
Hamilton, Ontario.

Surpass Petrochemicals Limited,
67 Yonge Street,
Toronto 1, Ontario.

Sybouts Sodium Sulphate Company Limited,
Gladmar, Saskatchewan.

Temuss Products Canada Limited,
P.O. Box 178,
Ajax, Ontario.

Toronto Elevators Limited,
Vegetable Oils Division,
Queen's Quay,
Toronto 1, Ontario.

Victory Soya Mills Limited,
285 Fleet Street E.,
Toronto 2B, Ontario.

Western Chemicals Limited,
c/o J.T. Donald & Company Ltd.,
1181 Guy Street,
Montreal 25, P.Q.

Western Whaling Corporation Ltd.,
Vancouver, B.C.

Wilsil Limited,
1239 Mill Street,
(P.O. Box 39),
Montreal, P.Q.

Woburn Chemicals Limited,
184 Laird Drive, Leaside,
Toronto 17, Ontario.

Zinc Oxide Company of Canada Ltd.,
6894 Notre Dame Street E.,
Montreal 5, P.Q.