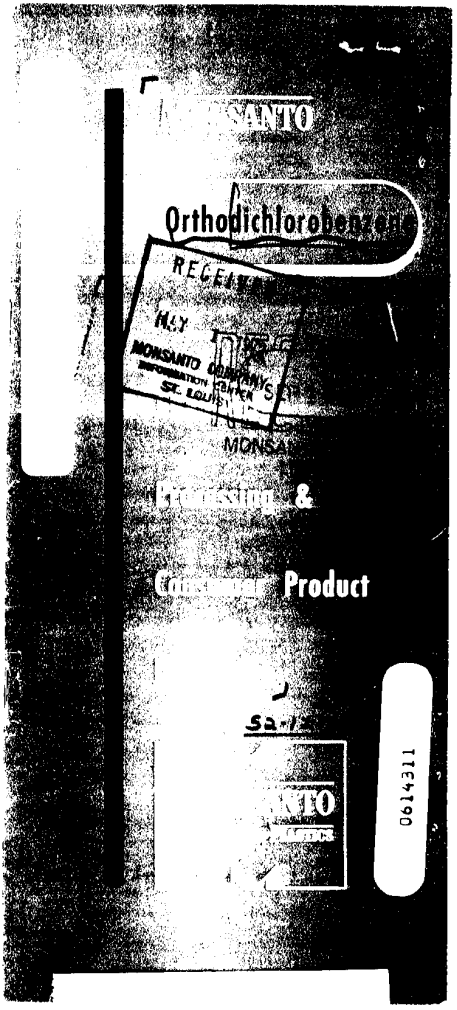


TOWOLDMON0038478
WATER_PCB-00022947



Orthodichlorobenzene is so versatile and possesses such a wide range of chemical and physical properties that it is a standard product in dozens of industries. It is insecticidal, has high solvent properties and low toxicity. This combination of useful properties makes Orthodichlorobenzene an important "stand-by" product for chemical, processing and consumer product industries.

Economical to use, Orthodichlorobenzene is available in quantity for immediate delivery.

In more and more industries this versatile organic chemical is saving money, simplifying processes or improving a product or process.

Automotive	Weed Killing	Cleaning Agent
Wool Scouring	Metal Polish	Tannery Pests
Insecticides	Leather Dyeing	Termite Control
Odor, Fly Control	Shoe Polishes	Entraining Agent
Petroleum Products	Paint, Varnish Remover	Machine Shop Solvent
Paints, Surface Coatings	Commercial Solvent	Soil Disinfectant
Dry Cleaning	Wire Cleaning	Gas Purification
		Cosmetic Processing

Water narcissus and similar undesirable underwater vegetation quickly succumb to Orthodichlorobenzene. Heavier than water, the plant-toxic liquid settles to the bottom and envelopes the vital parts of the water weeds. Is also effective on a number of land growths.



Because of high solvent power and slow evaporation rate, Orthodichlorobenzene is an effective "spotting" agent. Wetted with Orthodichlorobenzene before immersing in the cleaning solvent, the spotted areas dry out more slowly, formation of "ring" is less likely to occur and cleaning is more even.



The low order of toxicity of Orthodichlorobenzene makes the high-solvent-power liquid a valuable cleaning agent in machine shops, die works and tool rooms. Garages, too, use "ortho" for removing grease residues from wrenches, jacks, floors, and motor parts. Orthodichlorobenzene is far less hazardous in day-to-day use than gasoline.



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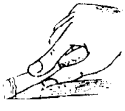
TOWOLDMON0038479
WATER_PCB-00022948



Orthodichlorobenzene has exceptional penetrating power. Is a valuable vehicle for carrying pigments and dyes through the surface and deep into the hide.



Orthodichlorobenzene is mutually miscible with hydrocarbons. Is used in oil additives, in upper cylinder lubricants, as a grease cutting agent and in radiator cleaners.



Orthodichlorobenzene can be used as a substitute for benzene in paint and varnish removers. Its non-flammable property and low toxicity offer additional advantages.

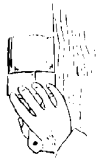


An excellent solvent for wax, Orthodichlorobenzene is suitable for formulating both liquid and paste type shoe polishes. Is less toxic than aniline or nitrobenzene and is non-flammable.

Orthodichlorobenzene is an excellent solvent for tars, greases, and oil. Safe, inexpensive—it is used in automobile and airplane shops for cleaning working parts, undersurface and fittings. Is also an important constituent in products used for removing road tar and grease.



Small amounts added to paints, varnishes and lacquers increase penetration, improve adhesion and decrease blush. Orthodichlorobenzene is compatible with typical paint vehicles and is a valuable ingredient in insecticidal paints. Possesses high flash point, solvent power and low volatility.



Sprinkled over garbage at collection stations, Orthodichlorobenzene directly retards fermentation and putrefaction. Indirectly, it retards organic waste deterioration by suppressing fly infestation. The odor of Orthodichlorobenzene helps mask the odors of the food wastes. (*See U. S. patent 1996353*)



Orthodichlorobenzene is toxic to beetles, grub worms and peach borers. Under proper conditions to prevent escape of the vapor, Orthodichlorobenzene is an effective agricultural fumigator and is as toxic to moths as paradichlorobenzene.



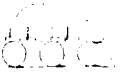
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TOWOLDMON0038480
WATER_PCB-00022949



Orthodichlorobenzene destroys many types of objectionable organic life in soils. While toxic to roots, seeds and seedlings, it may be used to disinfect ground plots by allowing adequate time for the disinfectant to disappear.

Orthodichlorobenzene is an excellent solvent for gaseous sulfur compounds. Is used for removing the odor-bearing sulfur compounds in illuminating gas.





Orthodichlorobenzene is an effective solvent to supplement the soap action in wool scouring. Effectively aids in the removal of tar markings on the wool, natural soil and wool fat. The detergent effect of the soap is greatly enhanced.

In the cosmetic industry, Orthodichlorobenzene is an effective equipment cleaner and is an all-purpose solvent for oils, fats and waxes used in cosmetic formulation.





Formulated with Orthodichlorobenzene as a base, metal polishes are singularly effective. The "ortho" dissolves non-ferrous metal oxides without affecting the metal. Is suitable for compounding both liquid and paste type polishes for brass and silver.

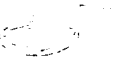
For cleaning floor and wall tile, gasoline pumps, grease dispensers, auto hoists and lubrication equipment, Orthodichlorobenzene is safe and effective. Is also used to remove chewing gum from floors.



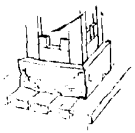


Skins stored in tanneries are susceptible to infestation and damage by hide beetles, webbing clothes moths and red-legged ham beetles. Treated with Orthodichlorobenzene and stored in a closed place to prevent volatilization, "doctored" hides are safe from attack.

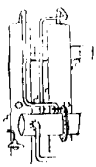
Orthodichlorobenzene is used in the electrical industry for cleaning old insulation from copper wire. It removes practically all varnish type insulations except those with a phthalic anhydride resin base.



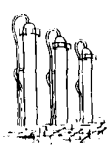
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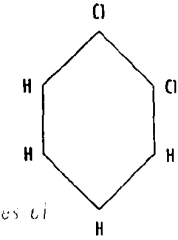
Orthodichlorobenzene has been recommended by the U. S. Department of Agriculture for soil poisoning against termites. As a termite control agent Orthodichlorobenzene may be used alone or mixed with another active material such as pentachlorophenol.



Orthodichlorobenzene dissolves cellulose acetate, sulfur and sulfur derivatives and tarry residues in stills and processing equipment. Low cost, safe to handle, high solubilizing power make "ortho" an important compound to lacquer manufacturers, chemical manufacturers and compounding industries.



Orthodichlorobenzene is being used in increasing quantities for recovery of valuable by-products in the distillation of crude oil. Its high solvent power, nonflammability and stability make it a valuable entraining agent for separating chemical compounds and for recovering chemicals of value out of waste materials.



General properties of Orthodichlorobenzene

Color	Colorless to slightly yellow liquid, APHA 40 max.
Odor	Sharp, aromatic.
Turbidity	Clear, may contain a slight residue.
Specific Gravity	1.305-1.313 @ 15/15°C.
Crystallizing Point	−7° C. max.
Stability	Stable under all ordinary atmospheric conditions.
Approx. wt./gal.	10.91 lbs. (15.5°C.)
Distilling Range	First Drop: 175°C. minimum. 90% (1 cc. to 91 cc.): 5° C. range, max. 100%: 14°C. range maximum.

Solubility of Orthodichlorobenzene

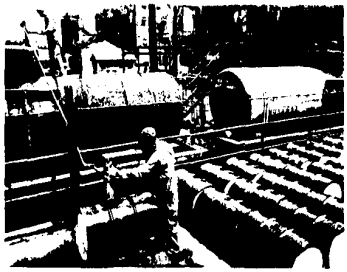
Alcohol	Slightly Soluble
Ether	Miscible in all proportions
Benzene	Miscible in all proportions
Ethylene Dichloride	Miscible in all proportions
Many Petroleum Oils & Waxes	Miscible in all proportions

Chemical characteristics of Orthodichlorobenzene

Dissolves non-ferrous metal oxides but is non-corrosive to metal. Does not precipitate

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TOWOLDMON0038482
WATER_PCB-00022951



Orthodichlorobenzene is a volatile solvent, but it is much less toxic than many others of this group. During 20 years' manufacturing experience, no systemic toxicity has occurred in our workers. Some simple precautions, however, should be observed:

1. Inhalation of the vapors in a confined space should be avoided, and the material should not be allowed to remain on the skin for a prolonged period of time.

2. A burning or stinging sensation may result from skin contact, but unless an individual is sensitive to the material, no skin irritation is to be expected.

3. If contact with the skin occurs, wash the parts immediately with soap and warm water.

Containers: *Tank Cars*
Black Iron Drums
(600 lbs. gross, 550 lbs. net)

Classification: *Orthodichlorobenzene*
Dichlorobenzene in California, Oregon and Washington for purposes of registration.

Some of the Industries Served by Monsanto:

Processing	Rubber	Plastics
Oil Refining	Metals	Paint
Paper	Leather	Glass
Food	Insecticides	Pharmaceutical
Textiles	Lumber	Power
Mining	Electrical	Cosmetics
Soap	Ceramics	Dyes
Fruit Growers	Laundry	Packaging
Water Treatment	Printing	Dairy Products
Aviation	Automotive	Appliances

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