o-Dichlorobenzene
9

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: o-Dichlorobenzene
Catalog Numbers:
11318-0010, 11318-0025, 22205-5000, 11.318.66, 22.205.89, 1063981, 1063999
Synonyms:
DCB; 1,2-Dichlorobenzene; ortho-Dichlorobenzene.
Company Identification: Acros Organics
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies outside the US, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	Einecs#
95-50-1	O-DICHLOROBENZENE	)98	202-425-9

Hazard Symbols: XN
Risk Phrases: 20

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: Colorless. Flash Point: 151°F.
Target Organs: Kidneys, central nervous system, liver.

Potential Health Effects

Eye:
Contact produces irritation, tearing, and burning pain.
Vapors cause eye irritation.

Skin:
Causes irritation with burning pain, itching, and redness.

Ingestion:
Harmful if swallowed.
May cause central nervous system depression, kidney damage, and liver damage.
May cause liver and kidney damage.
Exposure to substance has caused changes in organ weights (including kidney, liver, heart, lung, and brain).

Inhalation:
May cause respiratory tract irritation.
May cause liver and kidney damage.
May cause drowsiness, unconsciousness, and central nervous system depression.

Chronic:
Prolonged or repeated exposure may cause adverse reproductive effects.
May cause liver and kidney damage.
May cause fetal effects.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.
Get medical aid.

immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
Get medical aid if irritation develops or persists.

Ingestion:
If victim is conscious and alert, give 2-4 cupfuls of milk or water.
Get medical aid immediately.

Inhalation:
Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:
Treat symptomatically and supportively.
No specific antidote exists.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Combustion generates toxic fumes.

Extinguishing Media:
For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

Autoignition Temperature: 1198°F (647.78°C)
Flash Point: 151°F (66.11°C)
Explosion Limits, Lower: 2.2
Upper: 9.2

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:
Wash thoroughly after handling.
Remove contaminated clothing and wash before reuse.
Use with adequate ventilation.
Avoid contact with skin and eyes.
Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, sparks or open flames.
Keep container tightly closed.
Avoid ingestion and inhalation.

Storage:
Keep away from sources of ignition.
Store in a tightly closed container.
Store in a cool, dry, well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
O-DICHLOROBENZENE	25 ppm ; 150 mg/m3	C 50 ppm; C 300 mg/m3	C 50 ppm; C 300 mg/m3

	STEL; 301 mg/m3 STEL; C 50 ppm; C 301 mg/m3		

OSHA Vacated PELs:
O-DICHLOROBENZENE:
C 50 ppm; C 300 mg/m3

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin:
Wear appropriate gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29CFR 1010.134. Always use a NIOSH-approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Liquid
Appearance:	Colorless.
Odor:	Aromatic.
pH:	Not available.
Vapor Pressure:	1.15 mm Hg @ 20C
Vapor Density:	5.05 (air:1)
Evaporation Rate:	(1 (butyl acetate:1)
Viscosity:	Not available.
Boiling Point:	356°F
Freezing/Melting Point:	1.4°F
Decomposition Temperature:	Not available.
Solubility:	Practically insoluble in water.
Specific Gravity/Density:	1.31 (water:1)
Molecular Formula:	C6H4Cl2
Molecular Weight:	146.934

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to Avoid:
High temperatures, incompatible materials.
Incompatibilities with Other Materials:
Oxidizing agents, aluminum.
Hazardous Decomposition Products:
Hydrogen chloride, chlorine, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 95-50-1: CZ4500000
LD50/LC50:
CAS# 95-50-1: Oral, mouse: LD50 = 4386 mg/kg; Oral, rabbit: LD50 = 500 mg/kg; Oral, rat: LD50 = 500 mg/kg.
Carcinogenicity:
O-DICHLOROBENZENE -
ACGIH: A1-confirmed human carcinogen, as BENZIDINE
California: carcinogen, as ANILINE
NIOSH: occupational carcinogen (listed as ANILINE)

IARC: Suspect carcinogen
OSHA: Possible Select carcinogen
IARC: Group 3 carcinogen

Epidemiology:
No information available.
Teratogenicity:
Specific Developmental Abnormalities: Musculoskeletal, inhalation-rat TCLo:200ppm/6H.
Reproductive Effects:
Paternal Effects: Spermatogenesis, intraperitoneal-rat TDLo:50mg/kg.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
None.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
No information available.
Environmental Fate:
On soil, substance can be adsorbed to a significant extent. Leaching to groundwater can occur. In water, substance will adsorb to sediment. In air, substance will exist in the vapor phase and will react with photochemically-produced hydroxyl radicals.
Physical/Chemical:
No information available.
Physical/Chemical:
Please refer to the Handbook of Environmental Fate and Exposure Data (vol. I) for additional information.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA D-Series Maximum Concentration of Contaminants: Not listed.
RCRA D-Series Chronic Toxicity Reference Levels: Not listed.
RCRA F-Series: Not listed.
RCRA P-Series: Not listed.
RCRA U-Series: waste number U070
This material is banned from land disposal according to RCRA.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: O-DICHLOROBENZENE
Hazard Class: 6.1
UN Number: UN1591
Packing Group: III
IMO
Shipping Name: 1,2-DICHLOROBENZENE
Hazard Class: 6.1
UN Number: 1591
Packing Group: 3
IATA
Shipping Name: O-DICHLOROBENZENE
Hazard Class: 6.1
UN Number: 1591
Packing Group: 3
RID/ADR
Shipping Name: O-DICHLOROBENZENE
Dangerous Goods Code: 6.1(15C)
UN Number: 1591
Canadian TDG
Shipping Name: O DICHLOROBENZENE
Hazard Class: 6.1(9.2)
UN Number: UN1591

**** SECTION 15 - REGULATORY INFORMATION ****

A. Federal
TSCA
CAS# 95-50-1 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
CAS# 95-50-1: Testing required by: manufacturers; processors (40 CFR 799.10
Section 12b
CAS# 95-50-1: export notification required - Section 4
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
CERCLA/SARA
Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
Section 313
Section 313:
This material contains O-DICHLOROBENZENE (CAS# 95-50-1, >98%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
CAS# 95-50-1 is listed as a Hazardous Substance under the CWA.
CAS# 95-50-1 is listed as a Priority Pollutant under the Clean Water Act.
CAS# 95-50-1 is listed as a Toxic Pollutant under the Clean Water Act.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

B. State
O-DICHLOROBENZENE can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
California No Significant Risk Level:
None of the chemicals in this product are listed.

C. International
Canada
CAS# 95-50-1 is listed on Canada's DSL/NDSL List.
CAS# 95-50-1 is listed on Canada's Ingredient Disclosure List.
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 20 Harmful by inhalation.
Safety Phrases:
S 24/25 Avoid contact with skin and eyes.
Exposure Limits:
OEL-AUSTRALIA: TWA 50 ppm (300 mg/m3). OEL-AUSTRIA: TWA 50 ppm (300 mg/m3). OEL-BELGIUM: STEL 50 ppm (301 mg/m3); Skin. OEL-DENMARK: STEL 50 ppm (300 mg/m3). OEL-FINLAND: TWA 50 ppm (300 mg/m3); STEL 75 ppm (450 mg/m3); Skin. OEL-FRANCE: STEL 50 ppm (300 mg/m3). OEL-GERMANY: TWA 50 ppm (300 mg/m3); Skin. OEL-HUNGARY: TWA 50 mg/m3; STEL 100 mg/m3; Skin JAN9. OEL-JAPAN: STEL 50 ppm (300 mg/m3). OEL-THE NETHERLANDS: TWA 50 ppm (300 mg/m3). OEL-THE PHILIPPINES: TWA 50 ppm (300 mg/m3). OEL-POLAND: TWA 20 mg/m3. OEL-RUSSIA: STEL 50 mg/m3. OEL-SWEDEN: STEL 50 ppm (300 mg/m3) OEL-SWITZERLAND: TWA 50 ppm (300 mg/m3); STEL 100 ppm (600 mg/m3). OEL-THAILAND: TWA 50 ppm (300 mg/m3). OEL-TURKEY: TWA 50 ppm (300 mg/m3). OEL-UNITED KINGDOM: TWA 50 ppm (300 mg/m3); STEL 50 ppm. OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 ADDITIONAL INFORMATION ****

Additional Information: