Material Safety Data Sheet
1,2-Dichlorobenzene, 99%

ACC# 96324

Section 1 - Chemical Product and Company Identification

MSDS Name: 1,2-Dichlorobenzene, 99%
Catalog Numbers: AC113180000, AC113180010, AC113180025, AC113180050
Synonyms: o-Dichlorobenzene; Dichlorobenzene, Ortho, Liquid; O-Dichlorbenzol
Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
95-50-1	1,2-Dichlorobenzene	99	202-425-9

Hazard Symbols: XN N
Risk Phrases: 22 36/37/38 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless to light yellow liquid. Flash Point: 67 deg C. **Warning!** This substance has caused adverse reproductive and fetal effects in animals. May cause central nervous system depression. Harmful if swallowed. **Combustible liquid and vapor.** Causes eye and skin irritation. Causes digestive and respiratory tract irritation. Light sensitive.
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.
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 eyelids. Get medical aid.
Skin: Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Notes to Physician: Treat symptomatically and supportively.

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. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Combustion generates toxic fumes. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.
Extinguishing Media: Use water fog, dry chemical, carbon dioxide, or regular foam. Use agent most appropriate to extinguish fire. Cool containers with flooding quantities of water until well after fire is out.
Flash Point: 67 deg C (152.60 deg F)
Autoignition Temperature: 640 deg C (1,184.00 deg F)
Explosion Limits, Lower:2.20 vol %
Upper: 12.00 vol %
NFPA Rating: (estimated) Health: 2; Flammability: 2; Instability: 0

Section 6 - Accidental Release Measures

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

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
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: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. 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
1,2-Dichlorobenzene	25 ppm TWA; 50 ppm STEL	200 ppm IDLH	50 ppm Ceiling; 300 mg/m3 Ceiling

OSHA Vacated PELs: 1,2-Dichlorobenzene: No OSHA Vacated PELs are listed for this chemical.
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 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: colorless to light yellow
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: 179.0 - 180.0 deg C @ 760.00m
Freezing/Melting Point:-15 deg C
Decomposition Temperature: Not available.
Solubility: IN WATER: 0.13 G/L (20°C)
Specific Gravity/Density:1.3060g/cm3
Molecular Formula:C6H4Cl2
Molecular Weight:147.00

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.
Incompatibilities with Other Materials: Strong oxidizing agents, acids, 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:
Inhalation, rat: LC50 = 8150 mg/m3/4H;
Oral, mouse: LD50 = 4386 mg/kg;
Oral, rabbit: LD50 = 500 mg/kg;
Oral, rat: LD50 = 500 mg/kg;
Skin, rabbit: LD50 = >10 gm/kg;

Carcinogenicity:
CAS# 95-50-1:
ACGIH: A4 - Not Classifiable as a Human Carcinogen
IARC: IARC Group 3 - not classifiable
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: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: Terrestrial: Can be moderately to tightly adsorbed in soil. Volatilization from soil surfaces may be an important transport mechanism. Aquatic: Adsorption to sediment is a major environmental fate process. Atmospheric: Will exist predominantly in the vapor-phase. The half-life with photochemically produced hydroxyl radicals in the atmosphere has been estimated to be 24 days. Expected to slightly biodegrade and bioconcentrate.
Physical: No information available.
Other: Please refer to the Handbook of Environmental Fate and Exposure Data (vol. I) for additional information.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 95-50-1: waste number U070.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	O-DICHLOROBENZENE				No information available.
Hazard Class:	6.1				
UN Number:	UN1591				
Packing Group:	III				

Section 15 - Regulatory Information

US 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
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA

CERCLA Hazardous Substances and corresponding RQs
CAS# 95-50-1: 100 lb final RQ; 45.4 kg final RQ
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 95-50-1: acute, chronic, flammable.
Section 313
This material contains 1,2-Dichlorobenzene (CAS# 95-50-1, 99%),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.
STATE
CAS# 95-50-1 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts. California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols:
XN N
Risk Phrases:
R 22 Harmful if swallowed.
R 36/37/38 Irritating to eyes, respiratory system

and skin.
R 50/53 Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases:
S 23 Do not inhale gas/fumes/vapour/spray.
S 60 This material and/or its container must be disposed of as hazardous waste.
S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)
CAS# 95-50-1: 2
Canada - DSL/NDSL
CAS# 95-50-1 is listed on Canada's DSL List.
Canada - WHMIS
This product has a WHMIS classification of B3, D1B, D2B.
Canadian Ingredient Disclosure List
CAS# 95-50-1 is listed on the Canadian Ingredient Disclosure List.
Exposure Limits
CAS# 95-50-1: 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

MSDS Creation Date: 4/06/1999
Revision #3 Date: 3/18/2003