Material Safety Data Sheet

Name: 1 4-Dichlorobenze 97% Material Safety Data Sheet
Synonym:p-DCB, 1,4-Dichlorobenze, Dichlorocide, Paracide, Paradichlorobenzol, p-Chorophenyl chloride.
CAS: 106-46-7

Section 1- Chemical Product

MSDS Name: 1 4-Dichlorobenze 97% Material Safety Data Sheet
Synonym: p-DCB, 1,4-Dichlorobenzene, Dichlorocide, Paracide, Paradichlorobenzol, p-Chorophenyl chloride.

Company name	Langfang Xique Fine Chemical Co., Ltd
Address	Zhengjia village Dacheng town Langfang Hebei
Phone	0316-5843299
Fax	0316-5845669

Signal Word **WARNING**

Hazardous chemical classification	Pictogram	Hazard statement
Carcinogenicity Category 2		H351 Suspected of causing caner
Serious Eye Damage/Irritation Category 2A		H319 Causes serious eyes irritation
Acute Aquatic Toxicity Catagory 1		H400 very toxic to aquatic life
Chronic Aquatic Toxicity Category 1		H410 Very toxic to aquatic life with long lasting effects

Section 2- COMPOSITON, INFORMATION ON INGREDIENTS

CAS# Chemical Name content EINECS#
106-46-7 P-DICHLOROBENZENE >99% 203-400-5
Hazard Symbols: XN
Risk Phrases: 22 36/38

Section 3- HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Harmful if swallowed .Irritating to eyes and skin. Suspected of causing cancer

Potential Health Effects
Eye:
Exposure to solid may cause pain and redness. Exposure to high vapor concentrations may cause irritation .
Skin :
May cause skin irritation.
Ingestion:
May cause gastrointestinal irritation with nausea , vomiting and diarrhea. May cause liver and kidney damage.
Inhalation:
May cause respiratory tract irritation, may cause liver and kidney damage.
Chronic:
Overexposure may cause delayed kidney injury. Possible cancer hazard based on tests with laboratory animals. Chronic ingestion may cause liver damage. May cause anemia and other blood cell abnormalities.

Section 4 - FRIST AID MEASURES

Eyes： Flush eyes with plenty of water for least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately .
Skin :
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:
Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult , give oxygen.
Get medical aid if cough or other symptoms appear.
Notes to Physician

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. Dusts at sufficient concentrations can from explosive mixtures with air. Use water spray to keep fire-exposed containers cool.

Extinguishing method：
In case of fire, use water, dry chemical , chemical foam or alcohol-resistant foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

General information : use proper personal protective equipment as indicated in Section 8
Spills/Leaks:
Wear a self contained breathing apparatus and appropriate personal protection.(See Exposure Controls ,personal protection section)
Remove all sources of ignition. Carefully scoop up and place into appropriate disposal container.

Section 7 - HANDLING and STORAGE

Handling:
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Empty containers retain product residue (luquid and/or vapor)),and can be dangerous. Do not get on skin or eyes. Do not ingest or inhale. 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 cool ,dry ,well-ventilated area way 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.
Personal protective : Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA'S eye and face protection regulation in 29 CFR 1910.133 or European Standard EN166.
Skin:
Wear impervious gloves.
Clothing :
Wear appropriate protective clothing to prevent skin exposure.
Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1919.134 or European Standard EN 149. Always use NIOSH or European standard EN 149 approved respirator when necessary.

Section 9 - PHYSICAL AND CHEMICAL PROPERITES

Physical state: Solid
Appearance :not available
Odor: Distinctive mothball-like
PH: Not available
Vapor pressure: 1.18 mm Hg@ 25c
Viscosity : Not available
Boiling point :174 °C @ 760.00mm Hg
Freezing point/Melting point :53.0-56 deg°C
Autoignition temperature: :640°C(1184.00 deg F)
Flash point : 67deg°C (152.60 deg F)
Explosion limits, lower: 2.20 vol%
Explosion limits, upper 12.00 vol%
Solubility in water : insoluble
Specific gravity/Density : 1.2410g/cm3
Molecular formula : C6H4C12
Molecular weight :147.00

Section 10 - STABILITY AND REACTIVITY

Chemical Stability :

Stable at room temerature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

High temperatures, incompatible materials, ignition sources.

Incompatibilities with Other Materials :

Aluminum , oxidizing agents

Hazardous Decomposition Products :

Hydrogen chloride,chlorine , carbon monoxide, carbon dioxide
Hazardous polymerization: Has not been reported

Section 11 -TOXICOLOGICAL INFORMATION

RTECS#:
CAS# 106-46-7 :CZ4550000 LD50/LC50:
CAS# 106-46-7: Oral , mouse :LD50▪▪2950 mg/kg; Oral ,rabbit:LD50▪▪2830 mg/kg; Oral, rat:LD50▪▪500 mg/kg
Skin, rabbit :LD50▪▪> 2mg/kg skin, rat: LD50▪▪ >6 mg/kg
Carcinogenicity :
P.DICHLOROBENZENE - ACGIH:A3 - Animal Carcinogen California: carcinogen , initial date 1/1/89 NIOSH:
Occupational carcinogen NTP: Suspect carcinogen OSHA : possible select carcinogen IARC :Group 2B carcinogen see actual entry in RTECS for complete information.

Section 12 -ECOLOGICAL INFORMATION

Ecotoxicity :
Fish (fresh water) 50ppm lethal (no time interval specified) rainbow trout (fresh water) TLm ▪880mg/48H

Section 13 - DISPOSAL CONSIDERATIONS
Dispose of in a manner consistent with federal , state, and local regulations.

Section 13 - TRANSPORT INFORMATION
IATA
Shipping name : TOXIC SOLID , ORGANIC, N.O.S*
Hazard Class: 6.1
UN Number:2811
Packing Group : III
IMO
Shipping name : TOXIC SOLID , ORGANIC, N.O.S
Hazard Class: 6.1
UN Number:2811
Packing Group : III
RID/ADR
Shipping name : TOXIC SOLID , ORGANIC, N.O.S
Dangerous Goods Code: 6.1(25C)
UN Number 2811

Sections 15 - REGULATORY INFORMATION
European /International Regulations
European labeling in Accordance with EC Directives
Hazard symbols : XN
Risk Phrases :
R 22 Harmful if swallowed
R 36/38 Irritating to eyes and skin
Safety phrases:
S 2 keep out of reach of children
S 22 Do not breathe dust
S 24/25 Avoid contact with skin and eyes .
S 46 If swallowed , seek medical advice immediately and show this container or label
WGK (Water Danger /Protection)
CAS# 106-46-7 2
United Kingdom occupational exposure Limits
CAS# 106-46-7 :OES-United Kingdom ,TWA 25ppm TWA,153mg/m³ TWA
CAS# 106-46-7 :OES-United Kingdom ,STEL 50ppm STEL, 306mg/m³ STEL

Canada
CAS# 106-46-7 is listed on Canada's DSL List .
CAS# 106-46-7 is listed on Canada's Ingredient Disclosure List.
Exposure limits
CAS# 106-46-7 : OEL-AUSTRALIA :TWA 75PPM(450mg/m³), STEL 110 ppm (675mg/m³)
OEL - BELGURUM:TWA 75ppm (451mg/m³) , STEL 110 ppm (661mg/m³)
OEL - DENMARK: TWA 75ppm (451mg/m³)
OEL - FINLAND :TWA 75ppm (450mg/m³) STEL 115 ppm (690mg/m³)
OEL -FRANCE :TWA 75ppm (450mg/m³) STEL 110ppm (675mg/m³)
OEL -GERMAN :TWA 75ppm (450mg/m³)
OEL -JAPAN :TWA 50ppm (300mg/m³)
OEL -NETHERLANDS :TWA 75ppm (450mg/m³)
OEL -PHILIPPINES :TWA 75ppm (450mg/m³)
OEL -POLAND :TWA (20mg/m³)

OEL -RUSSIA :TWA 50ppm
OEL -SWEDEN :TWA 75ppm (450mg/m³) STEL 110ppm (700mg/m³)
OEL -SWITZERLAND :TWA 75ppm (450mg/m³) STEL 150ppm (900mg/m³)
OEL -TURKEY :TWA 75ppm (450mg/m³)
OEL -UNITED KINGDOM:TWA 75ppm (450mg/m³) STEL 11ppm
OEL IN BULGARIA , COLOMBIA,JORDAN, KOREA , check ACGIH TLV
OEL IN NEW ZEALAND , SINGAPORE, VIETNAM check ACGI TLV
US FEDERAL
TSCA
CAS# 106-46-7 is listed on the TSCA inventory .