

300-009

Paradichlorobenzene

SECTION 1. IDENTIFICATION

Product Identifier Paradichlorobenzene
Other Means of Identification 20-982, 21-103, 21-109, 21-111, 21-155, 21-164, 21-165, 21-166, 29-935
Recommended Use Please refer to Product label.
Restrictions on Use None known.
Manufacturer / Supplier Recochem Inc., 850 Montee de Liesse, Montreal, QC, H4T 1P4, Compliance and Regulatory Department, 905-878-5544, www.recochem.com
Emergency Phone No. CANUTEC, 613-996-6666, 24 Hours
SDS No. 1602

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) - Category 4; Serious eye damage/eye irritation - Category 2A; Carcinogenicity - Category 2;
Aquatic hazard (Acute) - Category 1; Aquatic hazard (Chronic) - Category 1

GHS Label Elements



Signal Word:
Warning

Hazard Statement(s):

H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash hands and skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

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P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

P330 Rinse mouth.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage:

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Other Hazards

This material becomes a combustible liquid when heated above 53.1°C.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

Chemical Name	CAS No.	%	Other Identifiers
1,4-Dichlorobenzene	106-46-7	100	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Get medical advice/attention if you feel unwell or are concerned.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Get medical advice/attention if you feel unwell or are concerned. If skin irritation occurs get medical advice/attention. Clean clothing, shoes and leather goods.

Eye Contact

Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice/attention.

Ingestion

Rinse mouth with water. Get medical advice/attention if you feel unwell or are concerned.

First-aid Comments

If exposed or concerned, get medical advice/attention.

Most Important Symptoms and Effects, Acute and Delayed

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Immediate Medical Attention and Special Treatment

Special Instructions

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Medical Conditions Aggravated by Exposure

None known.

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SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Chemical

Can ignite if strongly heated.

In a fire, the following hazardous materials may be generated: corrosive hydrogen chloride; corrosive phosgene.

Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills.

See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Evacuate downwind locations. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
1,4-Dichlorobenzene	10 ppm	Not established	75 ppm	110 ppm		

Appropriate Engineering Controls

General ventilation is usually adequate. For large scale use of this product: use a local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash in work area, if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Not normally required if product is used as directed. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	White crystalline.
Odour	Chlorinated Hydrocarbon
Odour Threshold	0.12 ppm (0.73 mg/m ³)
pH	Not applicable
Melting Point/Freezing Point	53.1 °C (127.6 °F) (melting); Not applicable (freezing)
Initial Boiling Point/Range	174 °C (345 °F)
Flash Point	63.5 °C (146.3 °F) (closed cup)
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	16% (upper); 2.5% (lower)
Vapour Pressure	0.98 mm Hg (0.13 kPa) at 15 °C
Vapour Density (air = 1)	5.08
Relative Density (water = 1)	1.2475 at 20 °C
Solubility	Practically insoluble in water; Soluble in all proportions in common organic solvents.
Partition Coefficient, n-Octanol/Water (Log K _{ow})	Not available
Auto-ignition Temperature	> 500 °C (932 °F)
Decomposition Temperature	Not available
Viscosity	Not applicable (kinematic); Not applicable (dynamic)
Other Information	
Physical State	Solid
Molecular Weight	147.00

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

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Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Temperatures above 63.0 °C (145.4 °F)

Incompatible Materials

Increased risk of fire and explosion on contact with: strong oxidizing agents (e.g. perchloric acid).

Not corrosive to metals.

Hazardous Decomposition Products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION**Likely Routes of Exposure**

Eye contact; skin contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
1,4-Dichlorobenzene	Not available	3790 mg/kg (female rat)	> 2000 mg/kg (rabbit)

LC50: Not applicable.

LD50 (oral): Not applicable.

LD50 (dermal): Not applicable.

Skin Corrosion/Irritation

Human experience and animal tests show no or very mild irritation. The vapour also irritates the skin.

Serious Eye Damage/Irritation

Human experience and animal tests show serious eye irritation. The vapour also irritates the eyes.

STOT (Specific Target Organ Toxicity) - Single Exposure**Inhalation**

Causes severe nose and throat irritation. At high concentrations

May cause At high concentrations depression of the central nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

Skin Absorption

Not harmful based on limited evidence.

Ingestion

May be harmful based on human experience. If large amounts are swallowed depression of the central nervous system. Can cause effects as described for inhalation. Irritation of the mouth, throat and stomach.

May be harmful based on animal tests. If large amounts are swallowed harmful effects on the kidneys, harmful effects on the liver.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Causes damage to organs based on studies in people. If inhaled and/or following skin contact: dermatitis. Symptoms may include dry, red, cracked skin (dermatitis).

May cause damage to organs based on studies in people and animals. If inhaled and/or swallowed: at high concentrations effects on the central nervous system, harmful effects on the kidneys, harmful effects on the liver. Blood tests may show abnormal results.

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Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
1,4-Dichlorobenzene	Group 2B	A3	Reasonably anticipated	Not Listed

Key to Abbreviations

A3 = Animal carcinogen.

Reproductive Toxicity**Development of Offspring**

Conclusions cannot be drawn from the limited studies available.

Sexual Function and Fertility

Conclusions cannot be drawn from the limited studies available.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

Conclusions cannot be drawn from the limited studies available.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION**Toxicity****Acute Aquatic Toxicity**

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
1,4-Dichlorobenzene	4.2 mg/L (Pimephales promelas (fathead minnow); 96-hour)	0.7 mg/L (Daphnia magna (water flea); 48-hour)		

Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
1,4-Dichlorobenzene	5.6 mg/L (Pimephales promelas (fathead minnow))		Not available	

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

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Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG Regulations.

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID (1,4-Dichlorobenzene)	9	III

Environmental Hazards Marine Pollutant (1,4-Dichlorobenzene)

Special Precautions for User Please note: Regulated only when in single package of 100lb(45.36kg) or more
Reportable quantity 100 lbs. (45.4 kg) DOT

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

California Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer.

SECTION 16. OTHER INFORMATION

SDS Prepared By Compliance and Regulatory Department

Phone No. 905-878-5544

Date of Preparation November 05, 2015

Additional Information We are committed to uphold the Industry Consumer Ingredient Communication Voluntary Initiative.

Please send us your request by visiting our website at www.recochem.com.

Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without respect to order of predominance.

Disclaimer

Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final

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determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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