









# Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Personal Protective Equipment
 	Class D-2A: Material causing other toxic effects (VERY TOXIC). B-3 combustible liquid when heated above melting point	   

## Section 1. Product and Company Identification

<b>Product Name / Trade name</b>	<b>para-Dichlorobenzene</b>	<b>Associated Product's Item Code</b>	<b>PARAZENE S</b>
<b>Synonym</b>	Not available.	<b>CAS #</b>	106-46-7
<b>Chemical Family</b>	Aromatic halogenated compound. (Aromatic.)	<b>Validation Date</b>	5/5/2005.
<b>Chemical Formula</b>	C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>	<b>Print Date</b>	5/5/2005.
<b>Manufacturer</b>	Recochem inc. 850 Montée de Liesse Montréal (Québec) (514) 341-3550 www.recochem.com	<b>In Case of Emergency</b>	Recochem Inc. Communications and Regulatory Affairs Department (905) 791-1788
<b>Material Uses</b>	Consumer products: Deodorizer. Moth preventative.		

## Section 2. Hazardous Ingredients

Name	CAS #	% by Weight	Exposure Limits	
			Canadian Values (ACGIH)	U.S. Values (OSHA)
para-Dichlorobenzene	106-46-7	100	<b>ACGIH (Canada, 2003).</b> TWA: 10 ppm 8 hour(s). TWA: 60 mg/m <sup>3</sup> 8 hour(s).	<b>OSHA (United States, 2003).</b> TWA: 75 ppm 8 hour(s). TWA: 450 mg/m <sup>3</sup> 8 hour(s).

## Section 3. Hazard Identification

<b>Emergency Overview</b>	<p>WARNING!</p> <p>CAUSES EYE IRRITATION. POSSIBLE CANCER HAZARD CONTAINS MATERIAL WHICH CAN CAUSE CANCER</p> <p>Risk of cancer depends on duration and level of exposure.</p> <p>Risk of cancer depends on duration and level of exposure. Do not get in eyes. Avoid prolonged contact with eyes, skin, and clothing. Do not ingest. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.</p>
<b>Potential Acute Health Effects</b>	<p>See Section #11: "Toxicological Information" for further human health effects.</p> <p>Hazardous in case of ingestion, . Slightly hazardous in case of skin contact (irritant), of eye contact (irritant, corrosive) , of inhalation (lung irritant). Non-corrosive for skin. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Severe over-exposure can produce lung damage, choking, unconsciousness or death.</p>
<b>Note to Physician</b>	Not available.

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### Section 4. First Aid Measures

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

### Section 5. Fire Fighting Measures

<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ), halogenated compounds, hydrogen chloride phosgene (COCl <sub>2</sub> ).
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
<b>Fire Hazards</b>	When heated to decomposition it emits acrid smoke and irritating fumes.
<b>Explosion Hazards</b>	Not available.

### Section 6. Accidental Release Measures

<b>Small Spill and Leak</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
<b>Large Spill and Leak</b>	Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

### Section 7. Handling and Storage

<b>Handling</b>	Avoid prolonged contact with eyes, skin, and clothing. Do not ingest. Avoid breathing dust. Do not get in eyes. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Storage</b>	<b>See Section #10 for applicable incompatible materials.</b> Keep container tightly closed. Keep container in a cool, well-ventilated area.

### Section 8. Exposure Controls, Personal Protection

<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Personal Protection</b>	
<b>Eyes</b>	Safety glasses.
<b>Body</b>	Lab coat.
<b>Respiratory</b>	Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
<b>Hands</b>	Impervious gloves.

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### Section 9. Physical and Chemical Properties

<b>Physical State and Appearance</b>	Solid. (Crystalline solid.)	<b>Odour</b>	Chlorinated hydrocarbon odour. (Strong.)
<b>Molecular Weight</b>	147.01 g/mole	<b>Taste</b>	Not available.
<b>pH (1% Soln/Water)</b>	Not applicable.	<b>Colour</b>	White. (Light.)
<b>Boiling/Condensation Point</b>	173°C (343.4°F)	<b>Volatility</b>	Not available.
<b>Melting/Freezing Point</b>	53°C (127.4°F)	<b>Evaporation Rate</b>	Not available.
<b>Specific Gravity</b>	1.46 (Water = 1)	<b>Odour Threshold</b>	15 ppm
<b>Vapour Pressure</b>	0.08 kPa (0.6 mm Hg) (at 20°C)	<b>Viscosity</b>	Not available.
<b>Vapour Density</b>	5.07 (Air = 1)	<b>Solubility</b>	Easily soluble in methanol, diethyl ether, acetone. Insoluble in cold water, hot water.
<b>VOC Content</b>	Not available.	<b>Other Properties</b>	Not available.
<b>The Product is:</b>	Combustible liquid. when melted		
<b>Auto-ignition Temperature</b>	413°C (775.4°F)		
<b>Flash Point</b>	Closed cup: 65.6°C (150.1°F). (TAG)		
<b>Flammable Limits</b>	LOWER: 2.5% UPPER: 16%		
<b>Fire Hazards in Presence of Various Substances</b>	Slightly flammable to flammable in presence of open flames, sparks and static discharge, of oxidizing materials. Non-flammable in presence of shocks, of heat.		

### Section 10. Stability and Reactivity

<b>Stability</b>	The product is stable.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with Various Substances</b>	Slightly reactive to reactive with OXIDIZING AGENTS, metals, alkalis.

### Section 11. Toxicological Information

<b>Routes of Entry</b>	Eye contact. Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 2830 mg/kg [Rabbit]. Acute dermal toxicity (LD50): 2000 mg/kg [Rabbit].
<b>Acute Effects on Humans</b>	<p><b>Eyes</b> Slightly hazardous in case of eye contact (irritant, corrosive). Eye contact can result in corneal damage or blindness.</p> <p><b>Skin</b> Slightly hazardous in case of skin contact (irritant). Non-corrosive for skin. The amount of tissue damage depends on length of contact. Skin contact can produce inflammation and blistering. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.</p>

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**Inhalation** Slightly hazardous in case of inhalation (lung irritant). Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Over-exposure by inhalation may cause respiratory irritation.

**Ingestion** May be fatal if swallowed. May cause burns to mouth, throat and stomach.

**Chronic Effects on Humans**

Hazardous in case of ingestion.

Slightly hazardous in case of skin contact (corrosive, irritant), of inhalation (lung irritant).

**CARCINOGENIC EFFECTS:** Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC.

**MUTAGENIC EFFECTS:** Classified None. for human.

**TERATOGENIC EFFECTS:** Classified None. for human.

**DEVELOPMENTAL TOXICITY:**

The substance may be toxic to kidneys, liver, skin, central nervous system (CNS).

Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

**Section 12. Ecological Information****Ecotoxicity**

For accidental discharges into environment, see Section #6: "Accidental Release Measures" for suggested instructions.

Not available.

**Section 13. Disposal Considerations****Waste Information**

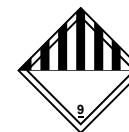
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14. Transport Information****Canada Transportation of Dangerous Goods (TDG) Information**

<b>Primary Class</b>	Class 9: Miscellaneous hazardous material.
<b>Subsidiary Class (if applicable)</b>	-
<b>Proper shipping name</b>	Environmentally hazardous substances n.o.s. (para-dichlorobenzene)
<b>Hazard Identification Number</b>	UN 3077
<b>Packing Group</b>	III
<b>Special Provisions</b>	Packages of 5kg or less are classed as "limited Quantity" "Consumer Commodities" according to TDG

**International Maritime Dangerous Goods (IMDG) Transportation Information**

<b>Primary Class</b>	Class 9: Miscellaneous hazardous material.
<b>Subsidiary Class (if applicable)</b>	-
<b>Proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (1,4-Dichlorobenzene).
<b>Hazard Identification Number</b>	UN 3077
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Marine Pollutant (IMDG)
<b>Special Provisions</b>	



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**Emergency Schedules (EmS)**

none

**Marine pollutant**

Marine pollutant (P)

**Remarks**

In containers of 5 L (5Kg) capacity or less this product is classified as a "Consumer Commodity" under IMDG regulations.

**United States Department of Transportation (DOT) Information****Primary Class**

Class 9: Miscellaneous hazardous material.

**Subsidiary class (if applicable)**

-

**Proper shipping name**

Environmentally hazardous substances, solid, n.o.s. (p-Dichlorobenzene) (1,4-Dichlorobenzene).

**Hazard Identification Number**

UN 3077

**Packing Group**

III

**Special Provisions**

Packages of 5kg or less are classed as "Consumer Commodities" according to DOT

**International Air Transport Association (IATA)**

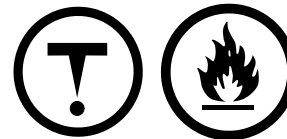
For air shipment classification and associated regulations, please refer to the latest edition of IATA Dangerous Goods Regulations.

**Section 15. Other Regulatory Information and Pictograms****WHMIS Classification (Canada)**

Class D-2A: Material causing other toxic effects (VERY TOXIC). B-3 combustible liquid when heated above melting point

**Canada Domestic Substances List (DSL) Status**

This product and/ or all of its components are on the DSL.

**HCS Classification (U.S.A.)**Target organ effects  
Corrosive Material**U.S.A. Regulatory Lists**

This product and/ or all of its components are on the TSCA inventory list.

**Hazardous Material Information System (U.S.A.)**

Health	2
Flammability	2
Reactivity	0
Personal Protection	E

**National Fire Protection Association (U.S.A.)**

	2	Flammability
Health	2	0
	0	Reactivity
		Specific Hazard

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**Section 16. Other Information**

Validated and verified by Compliance and Technical Information Manager on 5/5/2005.

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**Notice to Reader**

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*Final 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.*

***MSDS are available at [www.recochem.com](http://www.recochem.com)***