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

Product Name / Trade name	**Paradichlorobenzene**	**Associated Product's Item Code**	**21-165**
Synonym	Not available.	**CAS #**	106-46-7
Chemical Family	Aromatic halogenated compound. (Aromatic.)	**Validation Date**	**May 05 2005**
Chemical Formula	$C_6H_4Cl_2$	**Print Date**	May 05 2005
Manufacturer	Recochem inc. 850 Montée de Liesse Montréal (Québec) (514) 341-3550 www.recochem.com	**In Case of Emergency**	Recochem Inc. Communications and Regulatory Affairs Department (905) 791-1788
Material Uses	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	**ACGIH (Canada, 2003).** TWA: 10 ppm 8 hour(s). TWA: 60 mg/m^3 8 hour(s).	para-Dichlorobenzene **OSHA (United States, 2003).** TWA: 75 ppm 8 hour(s). TWA: 450 mg/m^3 8 hour(s).

Section 3. Hazard Identification

Emergency Overview

WARNING!

CAUSES EYE IRRITATION. POSSIBLE CANCER HAZARD
CONTAINS MATERIAL WHICH CAN CAUSE CANCER

Risk of cancer depends on duration and level of exposure.

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.

Potential Acute Health Effects

See Section #11: "Toxicological Information" for further human health effects.

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.

Note to Physician

Not available.

Continued on Next Page

Section 4. First Aid Measures

Eye Contact	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.
Skin Contact	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.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	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

Products of Combustion	These products are carbon oxides (CO, CO_2), halogenated compounds, hydrogen chloride phosgene ($COCl_2$).
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Fire Hazards	When heated to decomposition it emits acrid smoke and irritating fumes.
Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill and Leak	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill and Leak	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

Handling	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.
Storage	**See Section #10 for applicable incompatible materials.** Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls, Personal Protection

Engineering Controls	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.
Personal Protection	
Eyes	Safety glasses.
Body	Lab coat.
Respiratory	Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Hands	Impervious gloves.

Continued on Next Page

Section 9. Physical and Chemical Properties

Physical State and Appearance	Solid. (Crystalline solid.)	**Odour**	Chlorinated hydrocarbon odour. (Strong.)
Molecular Weight	147.01 g/mole	**Taste**	Not available.
pH (1% Soln/Water)	Not applicable.	**Colour**	White. (Light.)
Boiling/Condensation Point	173°C (343.4°F)	**Volatility**	Not available.
Melting/Freezing Point	53°C (127.4°F)	**Evaporation Rate**	Not available.
Specific Gravity	1.46 (Water = 1)	**Odour Threshold**	15 ppm
Vapour Pressure	0.08 kPa (0.6 mm Hg) (at 20°C)	**Viscosity**	Not available.
Vapour Density	5.07 (Air = 1)	**Solubility**	Easily soluble in methanol, diethyl ether, acetone. Insoluble in cold water, hot water.
VOC Content	Not available.	**Other Properties**	Not available.

The Product is:	Combustible liquid. when melted
Auto-ignition Temperature	413°C (775.4°F)
Flash Point	Closed cup: 65.6°C (150.1°F). (TAG)
Flammable Limits	LOWER: 2.5% UPPER: 16%
Fire Hazards in Presence of Various Substances	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

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

Section 11. Toxicological Information

Routes of Entry	Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 2830 mg/kg [Rabbit]. Acute dermal toxicity (LD50): 2000 mg/kg [Rabbit].

Acute Effects on Humans

Eyes	Slightly hazardous in case of eye contact (irritant, corrosive). Eye contact can result in corneal damage or blindness.
Skin	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.

Continued on Next Page

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 accidential discharges into environment, see Section #6: "Accidential 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

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

International Maritime Dangerous Goods (IMDG) Transportation Information

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

Continued on Next Page

Emergency Schedules (EmS)
none

Marine pollutant
Marine pollutant (P)

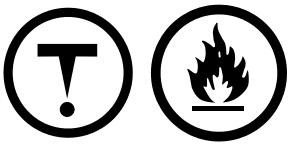
Remarks
In containers of 5 L (5Kg) capacity or less this product is classified as a "Consumer Commodity" under IMDG regulations.

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.

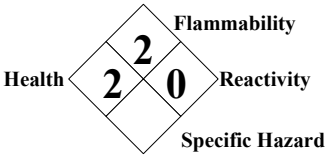
HCS Classification (U.S.A.)
Target organ effects
Corrosive Material

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.)



Continued on Next Page

Section 16. Other Information

Validated and verified by Compliance and Technical Information Manager on May 05 2005	Printed May 05 2005

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 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