



Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Personal protective equipment
	Class D-1B: Material causing immediate and serious toxic effects (Toxic). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).	

Section 1. Product and Company Identification

Product name / Trade name	P.V.R.	Associated Product's Item Code	WIP-13330
Synonym	PVR	CAS #	Mixture.
Chemical family	Solvent.	Validation date	21/01/2011.
Chemical formula	Not applicable.	Print date	21/01/2011.
Manufacturer/Supplier	Recochem Inc. 850 Montee de Liesse Montreal, Quebec H4T 1P4 (514) 341-3550 www.recochem.com	In case of emergency	Recochem Inc. Communications and Regulatory Affairs Department (905) 878-5544
Material uses	Coatings: Paint remover.		

Section 2. Hazards identification

Emergency Overview	MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. SUSPECT CANCER HAZARD - MAY CAUSE CANCER. Harmful if swallowed. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Risk of cancer depends on duration and level of exposure.
Potential Acute Health Effects	See section 11 for more detailed information on health effects and symptoms. Very hazardous by the following route of exposure: of skin contact (irritant corrosive permeator), of eye contact (irritant). Slightly hazardous by the following route of exposure: of ingestion, of inhalation. Inflammation of the eye is characterized by redness, watering and itching. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering. Risk of cardiac arrhythmia (irregular heartbeat) in sensitive individuals.
Note to Physician	Can be metabolized to carbon monoxide increasing levels of blood carbon hemoglobin. This product contains methanol. Acute exposure to methanol, either through ingestion or breathing high airborne concentrations can result in symptoms appearing between 40 minutes and 72 hours after exposure. Symptoms and signs are usually limited to CNS, eyes and gastrointestinal tract. Because of the initial CNS's effects of headache, vertigo, lethargy and confusion, there may be an impression of ethanol intoxication. Blurred vision, decreased acuity and photophobia are common complaints. Treatment with ipecac or lavage is indicated in any patient presenting within two hours of ingestion. A profound metabolic acidosis occurs in severe poisoning and serum bicarbonate levels are a more accurate measure of severity than serum methanol levels. Treatment protocols are available from most major hospitals and early collaboration with appropriate hospitals is recommended. This product contains Toluene, a known central nervous system (CNS) depressant. Handle situation of misuse accordingly.

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Section 3. Composition, information on ingredients**Canada**

Name	CAS number	Conc. (% w/w)
Methylene Chloride	75-09-2	70 - 90
Methanol	67-56-1	5 - 10
Toluene.	108-88-3	1 - 5

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Eye contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Notes to physician	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire-fighting measures

Products of combustion	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides
Fire-fighting media and instructions	Use an extinguishing agent suitable for the surrounding fire.
Fire Hazards	Vapour may burn in air at temperatures above 100°C.
Explosion Hazards	Not considered as a product presenting risks of explosion.

Section 6. Accidental release measures

Small spill and leak	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
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Large spill and leak

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). 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**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 get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Do not store above the following temperature: 30°C (86°F). Store in accordance with local regulations. 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. 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**Engineering controls**

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection

Eyes Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles
Possible: face shield

Body Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): nitrile rubber

United States**Product name**

Methylene Chloride

Exposure limits**ACGIH TLV (United States, 1/2008).**

TWA: 50 ppm 8 hour(s).

TWA: 174 mg/m³ 8 hour(s).**OSHA PEL 1989 (United States, 3/1989).**

STEL: 125 ppm 15 minute(s).

TWA: 25 ppm 8 hour(s).

OSHA PEL Z2 (United States, 11/2006).

STEL: 125 ppm 15 minute(s).

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Methanol	<p>TWA: 25 ppm 8 hour(s).</p> <p>ACGIH TLV (United States, 1/2008). Absorbed through skin. TWA: 200 ppm 8 hour(s). TWA: 262 mg/m³ 8 hour(s). STEL: 250 ppm 15 minute(s). STEL: 328 mg/m³ 15 minute(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. TWA: 200 ppm 8 hour(s). TWA: 260 mg/m³ 8 hour(s). STEL: 250 ppm 15 minute(s). STEL: 325 mg/m³ 15 minute(s).</p> <p>NIOSH REL (United States, 6/2008). Absorbed through skin. TWA: 200 ppm 10 hour(s). TWA: 260 mg/m³ 10 hour(s). STEL: 250 ppm 15 minute(s). STEL: 325 mg/m³ 15 minute(s).</p> <p>OSHA PEL (United States, 11/2006). TWA: 200 ppm 8 hour(s). TWA: 260 mg/m³ 8 hour(s).</p> <p>OSHA (United States, 2003). TWA: 200 ppm 8 hour(s). TWA: 260 mg/m³ 8 hour(s).</p>
Toluene.	<p>OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hour(s). TWA: 375 mg/m³ 8 hour(s). STEL: 150 ppm 15 minute(s). STEL: 560 mg/m³ 15 minute(s).</p> <p>OSHA PEL Z2 (United States, 11/2006). TWA: 200 ppm 8 hour(s). CEIL: 300 ppm AMP: 500 ppm 10 minute(s).</p> <p>NIOSH REL (United States, 6/2008). TWA: 100 ppm 10 hour(s). TWA: 375 mg/m³ 10 hour(s). STEL: 150 ppm 15 minute(s). STEL: 560 mg/m³ 15 minute(s).</p> <p>ACGIH TLV (United States, 1/2008). TWA: 20 ppm 8 hour(s).</p>

Canada		TWA (8 hours)			STEL (15 mins)			Ceiling			
Occupational exposure limits		ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	Notations
Methylene Chloride	US ACGIH 1/2008	50	174	-	-	-	-	-	-	-	
	AB 6/2008	50	174	-	-	-	-	-	-	-	
	BC 6/2008	25	-	-	-	-	-	-	-	-	
	ON 6/2008	50	175	-	-	-	-	-	-	-	
	QC 6/2008	50	174	-	-	-	-	-	-	-	
Methanol	US ACGIH 1/2008	200	262	-	250	328	-	-	-	-	[1]
	AB 6/2008	200	262	-	250	328	-	-	-	-	[1]
	BC 6/2008	200	-	-	250	-	-	-	-	-	[1]
	ON 6/2008	200	260	-	250	325	-	-	-	-	[1]
	QC 6/2008	200	262	-	250	328	-	-	-	-	[1]
Toluene.	US ACGIH 1/2008	20	-	-	-	-	-	-	-	-	

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AB 6/2008	50	188	-	-	-	-	-	-	-	-	[1]
BC 6/2008	20	-	-	-	-	-	-	-	-	-	
ON 6/2008	50	-	-	-	-	-	-	-	-	-	
QC 6/2008	50	188	-	-	-	-	-	-	-	-	[1]

[1] Absorbed through skin.

Section 9. Physical and chemical properties

Physical State and Appearance	Viscous liquid.	Odour	Ethereal.
Molecular weight	Not applicable.	Taste	Not available.
pH	Not available.	Colour	Colorless.
Boiling/condensation point	39.8°C (103.6°F)	Volatility	Not available.
Melting/freezing point	-97°C (-142.6°F)	Evaporation rate	27.5 compared with butyl acetate
Relative density	1.1 to 1.25	Odour Threshold	150 ppm
Vapor pressure	46.5 kPa (at 20°C)	Viscosity	Viscous liquid.
Vapour Density	2.93 (Air = 1)	Solubility	Soluble in the following materials: diethyl ether, acetone. Very slightly soluble in the following materials: cold water.
VOC content	Not available.	Other Properties	Not available.

The product is: May be combustible at high temperature.**Auto-ignition temperature** 556°C (1032.8°F)**Flash point** Not available.**Flammable limits** Lower: 12% Upper: 19%**Fire hazards in the presence of various substances** Non-flammable in the presence of open flames, sparks and static discharge.**Section 10. Stability and reactivity****Stability** The product is stable.**Conditions of instability** Not available.**Incompatibility with various substances** Reactive or incompatible with the following materials: oxidizing materials and acids.
Slightly reactive or incompatible with the following materials: alkalis.**Hazardous decomposition products** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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**Section 11. Toxicological Information****Canada****Acute toxicity**

Methylene Chloride	LC50 Inhalation Vapor	Rat	76000 mg/m3	4 hours
	LD50 Oral	Rat	985 mg/kg	-
Methanol	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Dermal	Rabbit	15840 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
Toluene.	LC50 Inhalation Vapor	Rat	49 g/m3	4 hours
	LD50 Oral	Rat	636 mg/kg	-
P.V.R.	LD50 Oral	Rat	2100 to 3000 mg/kg	-

Conclusion/Summary Not available.

Chronic toxicity

Conclusion/Summary Not available.

Carcinogenicity

Conclusion/Summary

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Methylene Chloride	A3	2B	-	+	Possible	+
Methanol	A5	4	-	-	-	None.
Toluene.	A4	3	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive Toxicity

Conclusion/Summary : Not available.

Section 12. Ecological information

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

Ecotoxicity : This product shows a low bioaccumulation potential.

Canada**Aquatic ecotoxicity**

Product/ingredient name	Result	Species	Exposure

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Methylene Chloride	Acute EC50 99000 to 121500 ug/L Fresh water	Fish - Pimephales promelas - 49 mm - 1.04 g	96 hours
	Acute LC50 108500 to 130900 ug/L Marine water	Crustaceans - Palaemonetes pugio - Juvenile (Fledgling, Hatchling, Weanling) - 20 mm	48 hours
	Acute LC50 220000 to 330000 ug/L Fresh water	Daphnia - Daphnia magna - <24 hours	48 hours
	Chronic NOEC 130 ppm Marine water	Fish - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) - 8 to 15 mm	96 hours
Methanol	Acute LC50 2500000 ug/L Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 3289 to 4395 mg/L Fresh water	Daphnia - Daphnia magna - Neonate - <24 hours	48 hours
	Acute LC50 >100000 ug/L Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g	96 hours
Toluene.	Acute EC50 6000 ug/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 15500 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 5500 ug/L Fresh water	Fish - Oncorhynchus kisutch - FRY - 1 g	96 hours

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available.

Section 13. Disposal considerations

Waste information

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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

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Section 14. Transport information

Canada TDG Classification

Class	Class 6.1: Toxic substance.
Subsidiary class	-
Proper Shipping Name (Canada) TDG	Dichloromethane
UN number	UN 2810
Packing Group	III
Special provisions	In containers of 5 L (5Kg) capacity or less this product is classified as a "Limited quantity" "Consumer Commodity" under TDG regulations.



IMDG Classification

Class	Class 6.1: Toxic substance.
Subsidiary class	-
Proper Shipping Name IMDG	Dichloromethane.
UN number	UN 2810
Packing Group	III
Marine pollutant	Not a pollutant.
Special provisions	-



United States DOT (Classification)

Class	Class 6.1: Toxic substance.
Subsidiary class	-
Proper Shipping Name (United States) DOT	Dichloromethane. (Dichloromethane, Methanol)
UN number	UN 2810
Packing Group	III
Special provisions	Containers of 4 L or less ship as: Class: ORM-D Name: Consumer Commodity RQ (Reportable quantity) DOT 1000 lbs. (454 kg)



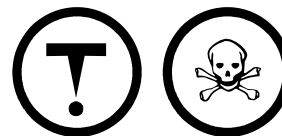
International Air Transport Association (IATA) For air shipment classification and associated regulations, please refer to the latest edition of IATA Dangerous Goods Regulations.

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Section 15. Regulatory information

WHMIS Classification (Canada) Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

Canada Domestic Substances List (DSL) Status This product and/ or all of its components are on the DSL.



HCS Classification (U.S.A.) Carcinogen
Target organ effects

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	1
Reactivity	0
Personal protection	H

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

**Section 16. Other information**

Validated and verified by Compliance and Technical Information Manager on 21/01/2011
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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