






Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Protective Clothing	TDG (pictograms)
	B-3		

Section 1. Chemical Product and Company Identification

Product Name	PETROSOL 3139	Code	101, S3139, W109
Synonym	Stoddard Solvent; Paint Thinner; Regular Mineral Spirits.	Validated on	7/13/2004.
Manufacturer	PETRO-CANADA P.O. Box 2844 Calgary, Alberta T2P 3E3	In case of Emergency	Petro-Canada: 403-296-3000 Canutec Transportation: 613-996-6666 Poison Control Centre: Consult local telephone directory for emergency number(s).
Material Uses	Petrosol 3139 is widely used in a variety of applications: thinning paints and varnishes; dissolving resins and plastics; diluent to formulate coatings, adhesives and printing inks; cleaning and degreasing metal and automotive parts; drycleaning solvent; floor and general household cleaner.		

Section 2. Composition and Information on Ingredients

			Exposure Limits (ACGIH)		
Name	CAS #	% (V/V)	TLV-TWA(8 h)	STEL	CEILING
Stoddard Solvent	8052-41-3	100	100 ppm	Not established	Not established
or Solvent Naphtha (Petroleum), Medium Aliphatic	64742-88-7	100	Not established	Not established	Not established
Manufacturer Recommendation	Stoddard Solvent contains the following chemicals that have exposure limits (ACGIH): Trimethylbenzene TLV-TWA (8 h)=25 ppm Naphthalene TLV-TWA (8 h)=10 ppm Ethyl Benzene TLV-TWA (8 h)=100 ppm <u>Solvent Naphtha (Petroleum), Medium Aliphatic contains:</u> 1, 2, 4-Trimethylbenzene TLV-TWA (8 h)=25ppm Manufacturer recommends adopting the Stoddard Solvent TLV-TWA (8 h) when handling Solvent Naphtha (Petroleum), Medium Aliphatic.				
Other Exposure Limits	Consult local, state, provincial or territory authorities for acceptable exposure limits.				

Section 3. Hazards Identification.

Potential Health Effects	Combustible liquid. Exercise caution when handling this material. Not expected to cause more than slight skin or eye irritation. Inhalation of this product may cause respiratory tract irritation and Central Nervous System (CNS) Depression, symptoms of which may include; weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; coma and death. Prolonged or repeated contact may cause skin irritation, defatting, drying and dermatitis. For more information refer to Section 11 of this MSDS.
---------------------------------	--

Section 4. First Aid Measures

Eye Contact	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.
Skin Contact	Remove contaminated clothing - launder before reuse. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Seek medical attention.
Inhalation	Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform artificial respiration. Allow the victim to rest in a well ventilated area. Seek medical attention.
Ingestion	DO NOT induce vomiting because of danger of aspirating liquid into lungs. Seek medical attention.
Note to Physician	Not available

Section 5. Fire-fighting Measures

Flammability	Class II - combustible liquid (NFPA).	Flammable Limits	Lower: 1.0%; Upper: 13.3%
Flash Points	CLOSED CUP: $\geq 43^{\circ}\text{C}$ (109.4°F). (Tag.)	Auto-Ignition Temperature	$\geq 229^{\circ}\text{C}$ (444°F)
Fire Hazards in Presence of Various Substances	Flammable, avoid open flames, sparks, static discharge and intense heat. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back. May accumulate in confined spaces.	Explosion Hazards in Presence of Various Substances	Do not cut, weld, heat, drill or pressurize empty container. Containers may explode in heat of fire.
Products of Combustion	Carbon oxides (CO, CO ₂), smoke and irritating vapours as products of incomplete combustion.		
Fire Fighting Media and Instructions	NAERG2000, GUIDE 128, Flammable liquids (Non-polar/Water-immiscible). CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. SMALL FIRES: Dry chemical, CO ₂ , water spray or regular foam. LARGE FIRES: Water spray, fog or regular foam. Do not use straight streams. Move containers from fire area if you can do it without risk. Fires Involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting devices or any discolouration of tank. ALWAYS stay away from the ends of tanks. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.		

Section 6. Accidental Release Measures

Material Release or Spill	IN THE EVENT OF A LARGE SPILL CONSIDER THE FOLLOWING CONTROL MEASURES: Consult current National Emergency Response Guide Book (NAERG) for appropriate spill measures if necessary. Evacuate non-essential personnel. Extinguish all ignition sources. Stop leak if safe to do so. Ventilate area. Dike spilled material. Use appropriate inert absorbent material to absorb spilled product. Avoid breathing vapours or mists of material. Avoid contact with spilled material. Avoid contaminating sewers, streams, rivers and other water courses with spilled material. If spilled in a confined space, ensure appropriate confined space entry protocols are followed. Notify appropriate authorities immediately.
----------------------------------	--

Section 7. Handling and Storage

Handling	COMBUSTIBLE MATERIAL. Handle with care. Avoid contact with any sources of ignition, flames, heat, and sparks. Ensure all equipment is grounded/bonded. Avoid confined spaces and areas with poor ventilation. Avoid skin contact. Avoid eye contact. Avoid inhalation of product vapours or mists. Empty containers may contain product residue. Do not pressurize, cut, heat, or weld empty containers. Do not reuse containers without commercial cleaning and/or reconditioning. Wear proper personal protective equipment (See Section 8). Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back. Personnel who handle this material should practice good personal hygiene during and after handling to help prevent accidental ingestion of this product.
Storage	Store away from incompatible and reactive materials (See section 5 and 10). Store away from heat and sources of ignition. Ensure the storage containers are grounded/bonded. Keep container tightly closed. Store in dry, cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	For normal application, special ventilation is not necessary. If user's operations generate vapours or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Make-up air should always be supplied to balance air removed by exhaust ventilation. Ensure that eyewash station and safety shower are close to work-station.
Personal Protection - The selection of personal protective equipment varies, depending upon conditions of use.	
Eyes	As a minimum, safety glasses with side shields should be worn when handling this material.
Body	If this material may come into contact with the body during handling and use, we recommend wearing appropriate protective clothing to prevent contact with the skin. (Contact your PPE provider for more information.)
Respiratory	A NIOSH-approved positive-pressure, air-supplied respirator or self-contained breathing apparatus may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. A NIOSH-approved air-purifying respirator with a organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

Hands If this material may come in contact with the hands during handling and use, we recommend wearing gloves of the following material(s): Polyvinyl alcohol (PVA), Fluoro-elastomer and Specialty Laminated. Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns.

Feet Wear appropriate footwear to prevent product from coming in contact with feet and skin.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Viscosity	1.14 cSt @ 25°C (77°F).
Colour	Clear, Colourless.	Pour Point	Freezing Point: -58°C (-72.4°F)
Odour	Kerosene-like. Mild petroleum oil like.	Softening Point	Not applicable.
Odour Threshold	1 ppm (approx.)	Dropping Point	Not applicable.
Boiling Point	157.8 to 201.1°C (316.0 to 394.0°F)	Penetration	Not applicable.
Density	0.79 kg/L @ 15.5°C (59.9°F).	Oil / Water Dist. Coefficient	The product is more soluble in oil.
Vapour Density	≥4.6 (Air = 1)	Ionicity (in water)	Insoluble in water.
Vapour Pressure	~0.30 kPa @ 20°C ~0.9 kPa @ 38°C (100.4°F).	Dispersion Properties	Easily dispersed in n-octanol.
Volatility	100% Volatile Evaporation rate ~0.1 (n-butyl acetate=1)	Solubility	In water ≤0.05g/L @ 25°C. Soluble in alcohol, ether, chloroform, and benzene.

Section 10. Stability and Reactivity

Corrosivity	Non corrosive.		
Stability	The product is stable under normal handling and storage conditions.	Hazardous Polymerization	Will not occur under normal working conditions.
Incompatible Substances / Conditions to Avoid	Reactive with oxidizing agents.	Decomposition Products	May release COx, smoke and irritating vapours when heated to decomposition.

Section 11. Toxicological Information

Routes of Entry	Skin contact, eye contact, inhalation, and ingestion.
Acute Lethality	Acute Oral toxicity (LD50): >5000 mg/kg (rat) Acute Dermal toxicity (LD50): >3000 mg/kg (rabbit) Acute Inhalation toxicity (LC50): >5500 mg/m ³ /4h (rat) (Stoddard Solvent) Acute Inhalation toxicity (LC50): >14.1 mg/L/4h (rat) (Solvent Naphtha (Petroleum), Medium Aliphatic)
Chronic or Other Toxic Effects	
Dermal Route:	Prolonged or repeated contact may defat and dry skin, and cause dermatitis.
Inhalation Route:	Ingestion of this product may cause Central Nervous System (CNS) Depression, symptoms of which may include; weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; coma and death.
Oral Route:	Ingestion of this product may lead to aspiration of the liquid, especially if vomiting occurs. This may result in chemical pneumonitis (inflammation of the lungs) and/or pulmonary edema (an accumulation of fluid in the lungs).
Eye Irritation/Inflammation:	Short-term exposure is expected to cause only slight irritation, if any.
Immunotoxicity:	Not available
Skin Sensitization:	Contact with this product is not expected to cause skin sensitization, based upon the available data and the known hazards of the components.
Respiratory Tract Sensitization:	Contact with this product is not expected to cause respiratory tract sensitization, based upon the available data and the known hazards of the components.
Mutagenic:	This product is not known to contain any components at ≥ 0.1% that have been shown to cause mutagenicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a mutagen.
Reproductive Toxicity:	Causes foetotoxicity in animals at doses which are maternally toxic. Not expected to impair fertility.
Teratogenicity/Embryotoxicity:	This product is not known to contain any components at ≥ 0.1% that have been shown to cause teratogenicity and/or embryotoxicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a teratogen/embryotoxin.

Carcinogenicity (ACGIH):	This product is not known to contain any chemicals at reportable quantities that are listed as A1, A2 or A3 carcinogens by ACGIH.
Carcinogenicity (IARC):	IARC Group 3: cannot be classified as to carcinogenicity to humans (Petroleum solvents).
Carcinogenicity (NTP):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by NTP.
Carcinogenicity (IRIS):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by IRIS.
Carcinogenicity (OSHA):	This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by OSHA.
Other Considerations	May cause kidney and liver effects after prolonged skin contact.

Section 12. Ecological Information

Environmental Fate	Not available	Persistence/Bioaccumulation Potential	Not available
BOD5 and COD	Not available	Products of Biodegradation	Not available
Additional Remarks No additional remark.			


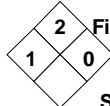
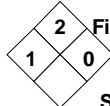
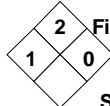
Section 13. Disposal Considerations

Waste Disposal	Spent/ used/ waste product may meet the requirements of a hazardous waste. Consult your local or regional authorities. Ensure that waste management processes are in compliance with government requirements and local disposal regulations.
-----------------------	--

Section 14. Transport Information

TDG Classification	PETROLEUM DISTILLATES, N.O.S., 3, UN1268, PGIII (CL-TDG)	Special Provisions for Transport	Not applicable.
---------------------------	--	---	-----------------

Section 15. Regulatory Information

Other Regulations		All components of this formulation are listed on the CEPA-DSL (Domestic Substances List).																					
		All components of this formulation are listed on the US EPA-TSCA Inventory.																					
		All components of this product are on the European Inventory of Existing Commercial Chemical Substances (EINECS).																					
		This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.																					
		Please contact Product Safety for more information.																					
DSD/DPD (Europe)		Not evaluated.	HCS (U.S.A.) CLASS: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).																				
ADR (Europe) (Pictograms)		NOT EVALUATED FOR EUROPEAN TRANSPORT NON ÉVALUÉ POUR LE TRANSPORT EUROPÉEN.	DOT (U.S.A) (Pictograms) 																				
HMIS (U.S.A.)		<table><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>2</td></tr><tr><td>Reactivity</td><td>0</td></tr><tr><td>Personal Protection</td><td>H</td></tr></table>	Health Hazard	1	Fire Hazard	2	Reactivity	0	Personal Protection	H	<table><tr><td>NFPA (U.S.A.)</td><td></td><td>Fire Hazard</td><td>Rating</td></tr><tr><td>Health</td><td>1</td><td>Reactivity</td><td>0</td></tr><tr><td></td><td></td><td>Specific hazard</td><td></td></tr></table>	NFPA (U.S.A.)		Fire Hazard	Rating	Health	1	Reactivity	0			Specific hazard	
Health Hazard	1																						
Fire Hazard	2																						
Reactivity	0																						
Personal Protection	H																						
NFPA (U.S.A.)		Fire Hazard	Rating																				
Health	1	Reactivity	0																				
		Specific hazard																					
			0 Insignificant 1 Slight 2 Moderate 3 High 4 Extreme																				

Section 16. Other Information

References	Available upon request. * Marque de commerce de Petro-Canada - Trademark
Glossary	

ACGIH - American Conference of Governmental Industrial Hygienists	IRIS - Integrated Risk Information System
ADR - Agreement on Dangerous goods by Road (Europe)	LD50/LC50 - Lethal Dose/Concentration kill 50%
ASTM - American Society for Testing and Materials	LDLo/LCLo - Lowest Published Lethal Dose/Concentration
BOD5 - Biological Oxygen Demand in 5 days	NAERG'96 - North American Emergency Response Guide Book (1996)
CAN/CGA B149.2 Propane Installation Code	NFPA - National Fire Prevention Association
CAS - Chemical Abstract Services	NIOSH - National Institute for Occupational Safety & Health
CEPA - Canadian Environmental Protection Act	NPRI - National Pollutant Release Inventory
CERCLA - Comprehensive Environmental Response, Compensation and Liability Act	NSNR - New Substances Notification Regulations (Canada)
CFR - Code of Federal Regulations	NTP - National Toxicology Program
CHIP - Chemicals Hazard Information and Packaging Approved Supply List	OSHA - Occupational Safety & Health Administration
CNS - Central Nervous System	PEL - Permissible Exposure Limit
COD5 - Chemical Oxygen Demand in 5 days	RCRA - Resource Conservation and Recovery Act
CPR - Controlled Products Regulations	RTECS - Registry of Toxic Effects of Chemical Substances
DOT - Department of Transport	SARA - Superfund Amendments and Reorganization Act
DSCL - Dangerous Substances Classification and Labeling (Europe)	SD - Single Dose
DSD/DPD - Dangerous Substances or Dangerous Preparations Directives (Europe)	STEL - Short Term Exposure Limit (15 minutes)
DSL - Domestic Substance List	TDG - Transportation Dangerous Goods (Canada)
EEC/EU - European Economic Community/European Union	TDLo/TCLo - Lowest Published Toxic Dose/Concentration
EINECS - European Inventory of Existing Commercial Chemical Substances	TLm - Median Tolerance Limit
EPA - Environmental Protection Agency	TLV-TWA - Threshold Limit Value-Time Weighted Average
EPCRA - Emergency Planning and Community Right to Know Act	TSCA - Toxic Substances Control Act
FDA - Food and Drug Administration	USEPA - United States Environmental Protection Agency
FIFRA - Federal Insecticide, Fungicide and Rodenticide Act	USP - United States Pharmacopoeia
HCS - Hazard Communication Standard	WHMIS - Workplace Hazardous Material Information System
HMS - Hazardous Material Information System	
IARC - International Agency for Research on Cancer	

For Copy of MSDSInternet: www.petro-canada.ca/msds

Canada-wide: telephone: 1-800-668-0220; fax: 1-800-837-1228

For Product Safety Information: (905) 804-4752

Prepared by Product Safety - TLM on 7/13/2004.

Data entry by Product Safety - RS.

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.