Material Safety Data Sheet

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

Section 1. Product and Company Identification

Product name / Trade name	Pure Turpentine	**Associated Product's Item Code**	13-300
Synonym	Spirit of turpentine	**CAS #**	8006-64-2
Chemical family	Solvent.	**Validation date**	Jan. 08 2013
Chemical formula	$C_{10}H_{16}$	**Print date**	Jan. 09 2013
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	Consumer products: Solvent.		

Section 2. Hazards identification

Emergency Overview	WARNING! FLAMMABLE LIQUID AND VAPOR. Flammable liquid. Keep away from heat, sparks and flame. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use.
Potential Acute Health Effects	**See section 11 for more detailed information on health effects and symptoms.** Slightly hazardous by the following route of exposure: of skin contact (irritant, sensitizer), of eye contact (irritant), of ingestion, of inhalation (lung irritant). Aspiration hazard if swallowed. Can enter lungs and cause damage.
Note to Physician	Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury and possible death.

Section 3. Composition, information on ingredients

Canada

Name	CAS number	Conc. (% w/w)
Turpentine	8006-64-2	100

There are no other 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.

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Section 4. First aid measures

Eye contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 30 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 30 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
Fire-fighting media and instructions	Use dry chemical, CO_2, water spray (fog) or foam.
Fire Hazards	Vapor may travel a considerable distance to source of ignition and flash back.
Explosion Hazards	Vapours may travel along ground and flashback along vapour trail.

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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
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). 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

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 vapor 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.

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Storage

Do not store above the following temperature: 35°C (95°F). 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

Engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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

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 i necessary. >8 hours (breakthrough time): nitrile rubber

United States

Product name	Exposure limits
Turpentine	**OSHA (United States, 2003).** TWA: 100 ppm 8 hour(s). **OSHA PEL (United States, 2003).** TWA: 560 mg/m³ 8 hour(s).

Occupational exposure limits

No exposure limit value known.

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Section 9. Physical and chemical properties

Physical State and Appearance	Liquid.	**Odour**	Characteristic. Pungent. [Strong]
Molecular weight	136 g/mole	**Taste**	Not available.
pH	Not available.	**Colour**	Colorless to Amber.
Boiling/condensation point	150 to 180°C (302 to 356°F)	**Volatility**	Not available.
Melting/freezing point	-60 to -50°C (-76 to -58°F)	**Evaporation rate**	<0.005 (Butyl acetate. = 1)
Relative density	0.86 to 0.875	**Odour Threshold**	100 ppm
Vapor pressure	0.67 kPa (5 mm Hg)	**Viscosity**	Not available.
Vapour Density	4.7 [Air = 1]	**Solubility**	Insoluble in water.
VOC content	100 % (w/w)	**Other Properties**	Not available.

The product is:	Flammable.
Auto-ignition temperature	253°C (487.4°F)
Flash point	Closed cup: 35°C (95°F) [Tagliabue.]
Flammable limits	Lower: 0.8%
Fire hazards in the presence of various substances	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. Vapor may travel a considerable distance to source of ignition and flash back.

Section 10. Stability and reactivity

Stability	The product is stable.
Conditions of instability	Not available.
Incompatibility with various substances	Slightly reactive or incompatible with the following materials: oxidizing materials, acids and alkalis. Incompatible with chlorine, chlorinated solvents. Avoid contamination with reactive substances.
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

Turpentine	LC50 Inhalation Vapor	Cat	540 mg/m³	4 hours
	LC50 Inhalation Vapor	Rat	2115 mg/L	4 hours

Conclusion/Summary Not available.

Chronic toxicity

Conclusion/Summary Not available.

Carcinogenicity

Conclusion/Summary Repeated skin exposure can produce local skin destruction, or dermatitis.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Turpentine	A4	-	-	-	-	-

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 : No known significant effects or critical hazards.

Canada

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available.

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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.

Section 14. Transport information

Canada TDG Classification	
Class	Class 3: Flammable liquid.
Subsidiary class	-
Proper Shipping Name (Canada) TDG	Turpentine (Turpentine)
UN number	UN 1299
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 3: Flammable liquid.
Subsidiary class	-
Proper Shipping Name IMDG	Turpentine (Turpentine)
UN number	UN 1299
Packing Group	III
Marine pollutant	Not a pollutant.
Special provisions	**Emergency schedules (EmS)** 3-07

No placard (handling and hazard label) required.

United States DOT (Classification)	
Class	Class 3: Flammable liquid.
Subsidiary class	-
Proper Shipping Name (United States) DOT	Turpentine (Turpentine)
UN number	UN 1299
Packing Group	III
Special provisions	In containers of 5 L (5Kg) capacity or less this product is classified as a "Consumer Commodity" under DOT regulations.

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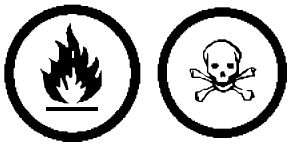
International Air Transport Association (IATA)	For air shipment classification and associated regulations, please refer to the latest edition of IATA Dangerous Goods Regulations.

Section 15. Regulatory information

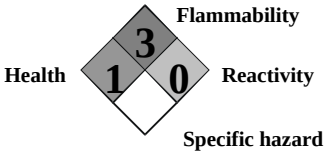
WHMIS Classification (Canada)	Class B-2: Flammable liquid Class D-1B: Material causing immediate and serious toxic effects (Toxic). Class D-2B: Material causing other toxic effects (Toxic).
Canada Domestic Substances List (DSL) Status	This product and/ or all of its components are on the DSL.
HCS Classification (U.S.A.)	Flammable liquid
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	1
Flammability	3
Reactivity	0
Personal protection	G

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



Section 16. Other information

Validated and verified by Compliance and Technical Information Manager Jan. 08 2013 **ph.# 905-878-5544.** **Printed** Jan. 09 2013

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