Safety Data Sheet



Issue Date 24-Mar-2010

Revision Date: 12-Sep-2013

Version 1

1. IDENTIFICATION

<u>Product Identifier</u> Product Name	SolvOil Advanced
Other means of identification SDS #	SVM-018-X

Product Code

27914 Formula X1007

Recommended use of the chemical and restrictions on useRecommended UseGrease Soil Lifter.

Details of the supplier of the safety data sheet

Manufacturer Address ServiceMaster [™] Clean 3635 Knight Road Ste 7 Memphis, TN, USA. 38118

Emergency Telephone Number

Company Phone Number Emergency Telephone (24 hr)

1-800-756-5656 (ServiceMaster™ Clean) INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Thin, water white liquid

Physical State Liquid

Odor Moth ball

Classification

Acute toxicity - Inhalation (Vapors)	Category 4
Serious eye damage/eye irritation	Category 2
Flammable Liquids	Category 4

Signal Word Warning

Hazard Statements

Harmful if inhaled Causes serious eye irritation Combustible liquid



Precautionary Statements - Prevention Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling Keep away from heat/sparks/open flames/hot surfaces. — No smoking Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a poison center or doctor/physician if you feel unwell IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Harmful to aquatic life with long lasting effects Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Diethylene Glycol Monobutyl Ether	112-34-5	2-15
1-chloro-4(trifluoromethyl) benzene	98-56-6	2-15
Sodium xylenesulfonate	1300-72-7	2-15
Triethanolamine	102-71-6	2-15

4. FIRST-AID MEASURES

First Aid Measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Flush eyes with water at least 20 minutes while holding eyelids open. Remove contact lenses. Rest eyes for 30 minutes.
Skin Contact	Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water.
Inhalation	Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Ingestion	If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Most important symptoms and effects

Symptoms	Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.		
Indication of any immediate medical attention and special treatment needed			
Notes to Physician	Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Respiratory system. Skin. Eyes.		

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, dry chemical, carbon dioxide or foam extinguishing agents.

Unsuitable Extinguishing Media Do not use solid water streams.

Specific Hazards Arising from the Chemical

Product is combustible & may ignite if exposed to high temperature or direct flame.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Avoid contact with spilled or released material. Immediately remove all contaminated clothing. Shut off leaks, if possible without personal risks. Use appropriate containment to avoid environmental contamination.		
Environmental Precautions	See Section 12 for additional Ecological Information.		
Methods and material for containn	nent and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so. Contain spill with dike to prevent entry into sewers or waterways.		
Methods for Clean-Up	For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible. Additional Advice See Chapter 13 for information on disposal. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur .U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity (refer to Chapter 15) to the National Response Centre at(800) 424-8802.This material is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Petroleum Exclusion. Therefore, releases to the environment may not be reportable under CERCLA.		

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Extinguish any naked flames. Do Not smoke. Remove ignition sources. Avoid sparks. Avoid contact with skin, eyes, and clothing. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

Conditions for safe storage. including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Must be stored in a diked (bunded) area. Bulk storage tanks should be diked (bunded).
Packaging Materials	For containers, or container linings use mild steel, stainless steel. For container paints, use epoxy paint, zinc silicate paint.
Incompatible Materials	Oxidizing agents. Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1-chloro-4(trifluoromethyl) benzene 98-56-6	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F TWA: 2.5 mg/m ³ dust (vacated) TWA: 2.5 mg/m ³	-
Triethanolamine 102-71-6	TWA: 5 mg/m ³	-	-

Other Information	Monitoring Methods: Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Examples of sources of recommended air monitoring methods are given below or contact supplier. Further national methods may be available. National Institute of Occupational Safety and Health (NIOSH), USA: Manual of analytical Methodshttp://www.cdc.gov/niosh/nmam/nmammenu.html Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.oshaslc.gov/dts/sltc/methods/toc.html Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hsl.gov.uk/search.htm.
Appropriate engineering controls	
Engineering Controls	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Eye washes and showers for emergency use. Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Chemical splash goggles (chemical monogoggles).
Skin and Body Protection	Longer term protection: Nitrile rubber gloves Incidental contact/Splash protection: PVC or neoprene rubber gloves Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.
Respiratory Protection	If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Appearance Color	Liquid Thin, water white liquid Clear	Odor Odor Threshold	Moth ball Not determined
Property pH Melting Point/Freezing Point Boiling Point/Boiling Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper Flammability Limits Lower Flammability Limit Vapor Pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents Partition Coefficient Autoignition Temperature Decomposition Temperature Kinematic Viscosity Explosive Properties Oxidizing Properties VOC Content (%) Density	Values9.4-9.9Not determinedNot determined> 71.11 °C / > 160 °FNot availableNot determined8.5%0.26%Not availableNot availableNot available0.98-1.03Soluble in waterNot determinedNot determined </th <th><u>Remarks • Method</u></th> <th></th>	<u>Remarks • Method</u>	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible Materials

Oxidizing agents. Acids.

Hazardous Decomposition Products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Information given is based on product testing, and/or similar products, and/or components
Eye Contact	Causes serious eye irritation; Causes noticeable pain, severe irritation and transient corneal injury.
Skin Contact	May cause mild irritation to skin.
Inhalation	Harmful if inhaled; May produce symptoms of central nervous system depression, including headache, dizziness, nausea, loss of balance and drowsiness.
Ingestion	May cause CNS depression, gastrointestinal tract, liver and kidney damage.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dipropylene glycol monobutyl ether 29911-28-2	= 1620 µL/kg (Rat)	= 5860 µL/kg (Rabbit)	> 2.04 mg/L (Rat)4 h = 42.1 ppm (Rat)4 h
Diethylene Glycol Monobutyl Ether 112-34-5	= 3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
Berol 260 SA	= 1378 mg/kg (Rat)	> 2 g/kg (Rabbit)	-
1-chloro-4(trifluoromethyl) benzene 98-56-6	= 13 g/kg (Rat)	> 2 mL/kg (Rabbit)	= 33 mg/L (Rat)4 h
Sodium xylenesulfonate 1300-72-7	= 7200 mg/kg (Rat)	-	-
Triethanolamine 102-71-6	= 4190 mg/kg (Rat)	> 2000 mg/kg (Rabbit)> 16 mL/kg (Rat)	-

Information on physical. chemical and toxicological effects

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Triethanolamine		Group 3		
102-71-6				

IARC (International Agency for Research on Cancer) Group 3 IARC components are "not classifiable as human carcinogens"

Chronic toxicity	Cardiovascular system: chronic abuse of similar materials has been associated with irregular heart rhythms and cardiac arrest. Central nervous system: repeated exposure affects the nervous system. Kidney: caused kidney effects in male rats which are not considered relevant to humans.
Numerical measures of toxicity Product Information	
Oral LD50 Dermal LD50	> 5000 mg/kg (rat) > 2000 mg/kg (rabbit)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Dipropylene glycol monobutyl ether 29911-28-2		841: 96 h Poecilia reticulata mg/L LC50 static		
Diethylene Glycol Monobutyl Ether 112-34-5	100: 96 h Desmodesmus subspicatus mg/L EC50	1300: 96 h Lepomis macrochirus mg/L LC50 static		2850: 24 h Daphnia magna mg/L EC50 100: 48 h Daphnia magna mg/L EC50
1-chloro-4(trifluoromethyl) benzene 98-56-6		11.5 - 15.8: 48 h Lepomis macrochirus mg/L LC50 static		3.68: 48 h Daphnia magna mg/L EC50
Triethanolamine 102-71-6	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	10600 - 13000: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Pimephales promelas mg/L LC50 static 450 - 1000: 96 h Lepomis macrochirus mg/L LC50 static		1386: 24 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

<u>Mobility</u>

Chemical Name	Partition Coefficient
1-chloro-4(trifluoromethyl) benzene	3.7
98-56-6	
Triethanolamine	-2.53
102-71-6	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.
Contaminated Packaging	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Refer to Section 7 before handling the product or containers. Residues may cause an explosion hazard if heated above the flash point. Do not puncture, cut or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

14. TRANSPORT INFORMATION

Note	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
DOT	Not regulated
IATA_	Not regulated
IMDG_ Marine Pollutant	This material may meet the definition of a marine pollutant
<u>TDG</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

<u>SARA 313</u>

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Diethylene Glycol Monobutyl Ether - 112-34-5	112-34-5	2-15	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Diethylene Glycol Monobutyl Ether 112-34-5	Х		Х
1-chloro-4(trifluoromethyl) benzene 98-56-6	Х		Х
Triethanolamine 102-71-6	Х	Х	Х

16. OTHER INFORMATION

<u>NFPA</u> HMIS	Health Hazards 2 Health Hazards 2	Flammability 1 Flammability 1	Instability 0 Physical Hazards 0	Special Hazards Not determined Personal Protection Not determined
Issue Date Revision Date: Revision Note	24-Mar-2010 12-Sep-2013 New format			

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet