



SAFETY DATA SHEET

1. Identification

Product identifier	Soluble Oil
Other means of identification	
Product Code	No. SL2512 (Item# 1007828)
Recommended use	Soluble oil
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufactured or sold by:	
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency	800-424-9300 (US)
(CHEMTREC)	703-527-3887 (International)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-methylpentane-2,4-diol		107-41-5	1 - 5
polyoxyl 10 oleyl ether		9004-98-2	1 - 5

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
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Skin contact	Wash off with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
Eye contact	Rinse immediately with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Drink 1 or 2 glasses of water. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention if symptoms occur. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Methods and materials for containment and cleaning up	The product is immiscible with water and will spread on the water surface. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. Prevent entry into waterways, sewer, basements or confined areas.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Wear appropriate personal protective equipment. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. When using, do not eat, drink or smoke. Wash contaminated clothing before reuse. Use appropriate container to avoid environmental contamination. For product usage instructions, see the product label.
Conditions for safe storage, including any incompatibilities	Keep away from heat and sources of ignition. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep container tightly closed.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA Components

Components	Type	Value
mineral oil	TWA	5 mg/m ³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components

Components	Type	Value
maleic anhydride (CAS 108-31-6)	PEL	1 mg/m ³
		0.25 ppm

ACGIH Components	Type	Value	Form
mineral oil	TWA	5 mg/m ³	Inhalable fraction
US. ACGIH Threshold Limit Values Components			
Components	Type	Value	Form
2-methylpentane-2,4-diol (CAS 107-41-5)	STEL	10 mg/m ³	Aerosol, inhalable.
	TWA	50 ppm	Vapor fraction
glutaraldehyde (CAS 111-30-8)	Ceiling	25 ppm	Vapor fraction
maleic anhydride (CAS 108-31-6)	TWA	0.05 ppm	
		0.01 mg/m ³	Inhalable fraction and vapor.
U.S. - NIOSH Components			
Components	Type	Value	Form
mineral oil	STEL	10 mg/m ³	Mist
	TWA	5 mg/m ³	Mist
US. NIOSH: Pocket Guide to Chemical Hazards Components			
Components	Type	Value	
2-methylpentane-2,4-diol (CAS 107-41-5)	Ceiling	125 mg/m ³	
		25 ppm	
glutaraldehyde (CAS 111-30-8)	Ceiling	0.8 mg/m ³	
		0.2 ppm	
maleic anhydride (CAS 108-31-6)	TWA	1 mg/m ³	
		0.25 ppm	

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear protective gloves such as: Neoprene. Nitrile. Latex. Polyvinyl chloride (PVC).
Other	Wear suitable protective clothing.
Respiratory protection	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Amber.
Odor	Mild petroleum.
Odor threshold	Not available.
pH	9.8 at 5% w/w
Melting point/freezing point	-58 °F (-50 °C) estimated

Initial boiling point and boiling range	> 212 °F (> 100 °C)
Flash point	250 °F (121.1 °C) Cleveland Open Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.4 % estimated
Flammability limit - upper (%)	7.1 % estimated
Vapor pressure	0.2 hPa estimated
Vapor density	Not available.
Relative density	0.92
Solubility(ies)	
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	588.2 °F (309 °C) estimated
Decomposition temperature	Not available.
Percent volatile	85 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged or excessive inhalation may cause respiratory tract irritation.
Skin contact	Prolonged skin contact may cause temporary irritation. Repeated exposure may cause skin dryness or cracking.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
2-methylpentane-2,4-diol (CAS 107-41-5)		
Acute		
Oral		
LD50	Rat	3700 mg/kg
glutaraldehyde (CAS 111-30-8)		
Acute		
Dermal		
LD50	Rabbit	2560 mg/kg

Components	Species	Test Results
Oral LD50	Rat	96.1 mg/kg
mineral oil		
Acute Dermal LD50	Rabbit	> 2000 mg/kg
Inhalation <i>Vapor</i> LC50	Rat	2180 mg/kg, 4 hours
Oral LD50	Rat	> 5000 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

ACGIH sensitization

GLUTARALDEHYDE, ACTIVATED AND INACTIVATED (CAS 111-30-8) Dermal sensitization

MALEIC ANHYDRIDE, INHALABLE FRACTION AND VAPOR (CAS 108-31-6) Respiratory sensitization
Dermal sensitization

Respiratory sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful.

Further information This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
2-methylpentane-2,4-diol (CAS 107-41-5)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Ceriodaphnia reticulata) 2800 mg/l, 48 hours
Fish	LC50	Bleak (Alburnus alburnus) 8000 mg/l, 96 hours

Components	Species	Test Results
maleic anhydride (CAS 108-31-6)		
Aquatic		
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) 230 mg/l, 96 hours
mineral oil		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) > 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 100 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	Not readily biodegradable.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
Hazardous waste code	Not regulated.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. Regulatory information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.	
SARA 304 Emergency release notification	Not regulated.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)	Not regulated.	
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance	maleic anhydride (CAS 108-31-6)	
CERCLA Hazardous Substance List (40 CFR 302.4)	maleic anhydride (CAS 108-31-6)	Listed.
CERCLA Hazardous Substances: Reportable quantity	maleic anhydride (CAS 108-31-6)	5000 LBS
	Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.	
Other federal regulations		
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	maleic anhydride (CAS 108-31-6)	
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	Not regulated.	

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Classified hazard categories Acute toxicity (any route of exposure)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
maleic anhydride	108-31-6	1 - 3

US state regulations

US. New Jersey Worker and Community Right-to-Know Act

2-methylpentane-2,4-diol (CAS 107-41-5)
glutaraldehyde (CAS 111-30-8)
maleic anhydride (CAS 108-31-6)

US. Massachusetts RTK - Substance List

2-methylpentane-2,4-diol (CAS 107-41-5)
glutaraldehyde (CAS 111-30-8)
maleic anhydride (CAS 108-31-6)

US. Pennsylvania Worker and Community Right-to-Know Law

2-methylpentane-2,4-diol (CAS 107-41-5)
glutaraldehyde (CAS 111-30-8)
maleic anhydride (CAS 108-31-6)

US. Rhode Island RTK

2-methylpentane-2,4-diol (CAS 107-41-5)
glutaraldehyde (CAS 111-30-8)
maleic anhydride (CAS 108-31-6)

California Proposition 65



WARNING: Reproductive Harm - www.P65Warnings.ca.gov

California Proposition 65 - CRT: Listed date/Developmental toxin

methanol (CAS 67-56-1) Listed: March 16, 2012

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

glutaraldehyde (CAS 111-30-8)
maleic anhydride (CAS 108-31-6)

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s)) 8 % (concentrate); 1.6 % (minimum dilution)

Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products This product is regulated as a Cutting or Tapping Oil (non-aerosol). This product is compliant for use in all 50 states.

VOC content (CA) 8 % (concentrate); 1.6 % (minimum dilution)

VOC content (OTC) 8 % (concentrate); 1.6 % (minimum dilution)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Toxic Chemical Substances (TCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	11-25-2014
Revision date	12-11-2017
Prepared by	Allison Yoon
Version #	02
HMIS® ratings	Health: 1 Flammability: 1 Physical hazard: 0 Personal protection: B
NFPA ratings	Health: 1 Flammability: 1 Instability: 0

NFPA ratings



Disclaimer

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

Revision information

Composition/information on ingredients: Component information
 Accidental release measures: Methods and materials for containment and cleaning up
 Handling and storage: Precautions for safe handling
 Physical & Chemical Properties: Multiple Properties
 Toxicological Information: Toxicological Data
 Toxicological information: Respiratory sensitization
 Disposal considerations: Disposal instructions
 Regulatory information: California Prop 65
 Regulatory information: US federal regulations
 Other information, including date of preparation or last revision: Disclaimer