SAFETY DATA SHEET



1. Identification

Product identifier	S-1381 Solvent Blend
Other means of identification	
Product code	0300545
Recommended use	Solvent
Recommended restrictions	None known.
Manufacturer	Superior Oil Company, Inc. 1402 North Capitol Avenue, Suite #100 Indianapolis, IN 46202 US Information (317) 781-4400 Emergency (317) 781-4400

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Not classified.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		
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Signal word	Warning
Hazard statement	
H226 H401 H411	Flammable liquid and vapor. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Prevention	 P210 - Keep away from heat/sparks/open flames/hot surfaces No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P273 - Avoid release to the environment. P280 - Wear protective gloves/eye protection/face protection.
Response	 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P370 + P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage.
Storage	P403 + P235 - Store in a well-ventilated place. Keep cool.
Disposal	P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Petroleum Distillates, Hydrotreated Light	Hydrotreated light distillates (petroleum)	64742-47-8	80-100
Citrus Terpenes		5989-27-5	10-30

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If overexposure to vapors or mist, move to fresh air. Call a physician if breathing becomes difficult.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms occur.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.
General information	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Dry chemicals. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Flammable liquid and vapor.

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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Prevent product from entering drains. 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.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product

release to the environment. Do not empty into drains.

must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid

Keep away from heat and sources of ignition. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Occupational exposure limits US. NIOSH: Pocket Guide			
Components	Туре	Value	
Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)	TWA	100 mg/m3	
•	ironmental Exposure Level (WEEL)		
Components	Туре	Value	
Citrus Terpenes (CAS 5989-27-5)	TWA	165.5 mg/m3	
		30 ppm	
Biological limit values	No biological exposure limits noted for	No biological exposure limits noted for the ingredient(s).	
Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. 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 Eye/face protection	res, such as personal protective equ Wear safety glasses with side shields	-	
Hand protection	Wear protective gloves.		
Skin protection			
Other	Wear appropriate chemical resistant clothing.		
Respiratory protection	Wear positive pressure self-contained breathing apparatus (SCBA).		
General hygiene considerations		oserve good personal hygiene measures, such as washing after ing, drinking, and/or smoking. Routinely wash work clothing contaminants.	

9. Physical and chemical properties

Appearance	Clear.
Physical state	Liquid.
Form	Liquid.
Color	Colorless.
Odor	Mild Citrus.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and	321.8 °F (161 °C) approx
boiling range	
Flash point	107.6 °F (42.0 °C) Lowest Flashing component
Evaporation rate	> 1 (Butyl Acetate = 1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	2.63 hPa (1 hPa = 0.75006 mmHg)
Vapor pressure temp.	@ 20 Deg. C
Vapor density	> 1 (Air = 1)
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Negligible.

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Flash point class	Combustible II
Percent volatile	99.09 %
Pounds per gallon	6.58 lb/gal
Specific gravity	0.79
VOC (Weight %)	99.09 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No hazardous reaction known under normal conditions of use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Suitable precautions should be utilized if using this product at temperatures above the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizers and strong acids.
Hazardous decomposition products	No hazardous decomposition products are known if stored and applied as directed.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

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Components	Species	Test Results		
Citrus Terpenes (CAS 5989	9-27-5)			
Acute				
Dermal				
LD50	Rabbit	5 g/kg		
Oral				
LD50	Mouse	5600 - 6600 mg/kg		
Other				
LD50	Mouse	1.3 g/kg		
	Rat	0.11 g/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				
Respiratory sensitization	Not available.			
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
Citrus Terpenes (CAS 598	9-27-5) 3 Not classifiable as to carcinogenicity to humans.
US. OSHA Specifically Reg	ulated Substances (29 CFR 1910.1001-1050)
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.

12. Ecological information

Ecotoxicity

Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Components		Species	Test Results		
Citrus Terpenes (CAS 5989-	27-5)				
Aquatic					
Crustacea	EC50	Water flea (Daphnia pulex)	69.6 mg/l, 48 hours		
Fish	LC50	Fathead minnow (Pimephales promelas)	0.619 - 0.796 mg/l, 96 hours		
Petroleum Distillates, Hydro	treated Light ((CAS 64742-47-8)			
Aquatic					
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours		
* Estimates for product may	be based on a	dditional component data not shown.			
Persistence and degradabilit	y No data is	available on the degradability of this product.			
Bioaccumulative potential	No data av	ailable.			
Partition coefficient n-oc	tanol / wate				
Citrus Terpenes		4.232			
Mobility in soil	No data av	ailable.			
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 considerat	ions				
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.				
Local disposal regulations	Dispose in	accordance with all applicable regulations.			
Waste from residues / unused products		in accordance with local regulations. Empty c his material and its container must be dispose 5).			

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

NA1993
Combustible Liquid, n.o.s. (Petroleum Distillates, Terpene Hydrocarbons)
Combustible Liquid
III
128

DOT NON-BULK

Not regulated as dangerous goods.

15. Regulatory information

Thi	is product is a	"Hazardous	Chemical"	as defined b	by the OSHA	Hazard Co	mmunication	Standard,
29	CFR 1910.120	0.			-			

All components are on the U.S. EPA TSCA Inventory List.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Hazard categories

US federal regulations

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

Yes

SARA 311/312 Hazardous chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)

US. New Jersey Worker and Community Right-to-Know Act Petroleum Distillates, Hydrotreated Light (CAS 10000 LBS 64742-47-8)

US. Pennsylvania RTK - Hazardous Substances

Petroleum Distillates, Hydrotreated Light (CAS 64742-47-8)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
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)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*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 Version #	01-27-2015 01
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Revision Information	Physical & Chemical Properties: Multiple Properties Transport Information: Material Transportation Information Regulatory Information: United States