

NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires SDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.

SECTION 1. IDENTIFICATION

Product Identifier: OrangeSolv
 Product Use: Citrus Solvent, Cleaner and Emulsifier
 Manufactured by: Kor-Chem, Inc.
 5800 Bucknell Drive
 Atlanta, GA 30336

Product Identification # (PIF): 00952
 Emergency Telephone #: 1-800-255-3924 ChemTel
 General Information #: 404-344-9580
 Date Prepared: October 24, 2005
 Date Revised: November 9, 2016 – version #3

SECTION 2. HAZARD(S) IDENTIFICATION

GHS Hazard Codification:



Signal Word: WARNING

Hazard Statement	Category	Code	Hazard Class
Flammable liquid and vapor	3	H226	Flammable Liquid
May be harmful if swallowed	5	H303	Acute Toxicity, Oral
Causes skin irritation	2	H315	Skin Irritation
May cause an allergic skin reaction	1	H317	Skin Sensitization
Very toxic to aquatic life with long-lasting effects	1	H410	Hazardous to the Aquatic Environment, Long-term

Precautionary Measures:

Category	Code	Statement
Prevention	P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing fumes/gas/mists/vapors/sprays. Wash thoroughly after handling. Do not eat, drink or smoke or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
	P233	
	P240	
	P241	
	P242	
	P243	
	P261	
	P264	
	P270	
	P272	
	P273	
P280		
Response	P301+P312+P330	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatments: See Section 4 First Aid Measures. Wash contaminated clothing before reuse. In case of fire: Use foam, dry chemical, carbon dioxide fire extinguishers or water spray for extinction. Collect spillage.
	P303+P361+P353	
	P352	
	P333+P313	
	P321	
	P363	
Storage	P403+P235	Store in a well ventilated place. Keep cool.
Disposal	P501	Dispose of contents/container in compliance with all Federal, State/Provincial and local laws and regulations.

Hazards not otherwise classified: Prolonged or repeated contact may cause drying of the skin. High vapor concentrations may cause respiratory tract irritation, coughing and headache. Ingestion may cause vomiting and headache.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Common Name	CAS #	Concentration Range %
D-Limonene	Orange Terpenes	5989-27-5	93 – 97

SECTION 4. FIRST AID MEASURES

Eyes: Flush well with water for at least 15 minutes, holding eyelids open. Remove any contact lenses and continue rinsing. Seek medical attention if irritation persists.

Skin: Remove immediately all contaminated clothing and launder before reuse. Rinse skin with water/shower. Wash with soap and water. If irritation persists or rash occurs, seek medical attention. Contaminated work clothing should not be allowed out of the workplace.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, have a trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration by way of pocket mask equipped with one-way valve or other proper respiratory device – Do NOT use mouth-to-mouth method if victim inhaled material. Call a physician.

Ingestion: DO NOT INDUCE VOMITING. Call a physician. Rinse mouth and drink 1-2 glasses of water to dilute. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

SECTION 5. FIRE-FIGHTING MEASURES

Flash Point: >113°F (>45°C)

Flammability: Class II Combustible Liquid

Extinguishing Media: Foam, dry chemical, carbon dioxide fire extinguishers, water spray. Do not spray water directly on fire. Use water spray to cool containers.

Specific hazards arising from chemical: Vapors are heavier than air and may travel along the ground to an ignition source. Readily ignited by static discharge.

Hazardous combustion products: Carbon monoxide and carbon dioxide.

Firefighting protective equipment: Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

Sensitivity to static discharge: This product is combustible and readily ignited even by static discharge. Grounding equipment is recommended.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment (Section 8). Keep away from heat/sparks/open flames/hot surfaces – No smoking. Ventilate area. Avoid breathing fumes/gas/mists/vapors/sprays. Avoid release to the environment – Collect spillage. Wash thoroughly after handling.

For Small Spills: Spilled material is slippery. Avoid dispersal of material and runoff into soil, waterways, drains and sewers. Vapor-suppressing foam may be used to reduce vapors. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste with non-sparking tools. Wash walking surfaces with water to reduce slipping hazard. Dispose of contaminated absorbent material in accordance with local, state and federal regulations.

For Large Spills: Large spills cannot occur due to packaging.

SECTION 7. HANDLING AND STORAGE

Handling: Wear personal protection equipment (Section 8). Use with adequate ventilation. Avoid breathing fumes/gas/mists/vapors/sprays. Keep away from heat/sparks/open flames/hot surfaces – No smoking. Use proper bonding and grounding during product transfer as described in document NFPA 77. Use explosion-proof equipment and non-sparking tools. Take precautionary measures against static discharge. Vapors are heavier than air and may travel along the ground to an ignition source. Never use welding or cutting torch on or near drum (even empty) because product can ignite explosively. Do not premix with other chemicals. Do not eat, drink or smoke in work areas. Wash thoroughly after handling.

Storage: Keep away from heat, flame, or sunlight – Keep cool. Keep from freezing. Keep container tightly closed when not in use. Store in a well-ventilated place. Protect from physical damage. Store away from strong oxidizing agents and strong acids.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	CAS #	OSHA/PEL	ACGIH/TLV	STEL
D-Limonene	5989-27-5	Not determined	Not determined	Not determined

Engineering Controls: Provide adequate ventilation. Observe occupational exposure limits and keep the risk of exposure to a minimum.

Personal protective equipment:

Eye: Safety glasses with side shields or splash proof goggles. Wear a face shield if splashing hazard exists.

Skin: Chemical resistant (impervious) gloves. Normal materials handling clothing. Wear apron if handling large amounts. Boots.

Respirator: Use NIOSH approved protection if vapors are causing irritation, or if ventilation is inadequate.

Other: Use in a well ventilated area. Do not eat, drink or smoke while handling. Wash thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Orange, clear liquid	Upper/Lower flammability limits	Not determined
Odor	Citrus	Vapor pressure	Not determined
Odor threshold	Not determined	Vapor density (Air = 1)	>1
pH	Not applicable	Specific gravity (water = 1.0)	0.850 g/ml
Melting point	Not determined	Solubility	Insoluble in water
Freezing point	Not determined	Partition coefficient (n-octanol/water)	Not determined
Boiling point	Not determined	Auto-ignition temperature	Not determined
Flash point	>113°F (>45°C)	Decomposition temperature	Not determined
Evaporation rate (n-butyl acetate=1)	<1	Viscosity	Not determined
Flammability	Class II Combustible	VOC by weight	95%

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions.

Chemical stability: Stable under normal, ambient temperature and conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Heat, flame and sparks. Keep from freezing. Do not mix with other chemicals

Incompatible materials: Avoid strong oxidizing agents and strong acids.

Hazardous combustion products: Carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity:

Oral (LD50 Rat): 4400mg/kg

Dermal (LD50 Rabbit): >5g/kg

Inhalation (LC50 Rat): Not determined

Skin corrosion/irritation: Skin irritant. Symptoms may include skin reddening, swelling and itching. Prolonged/repeated skin exposures can result in dermatitis. May cause an allergic skin reaction with rash.
Serious eye damage/irritation: Not classified. May cause eye mild irritation.
Respiratory or skin sensitization: May cause an allergic skin reaction with rash.
Germ cell mutagenicity: No data available
Carcinogenicity: NTP/IARC/OSHA Carcinogen: IARC Group 3 – Orange Terpenes CAS# 5989-27-5
Reproductive toxicity: Not classified
STOT-single exposure: Not classified. High vapor concentrations may cause respiratory tract irritation, coughing and headache.
STOT-repeated exposure: Not classified
Aspiration hazard: Not classified
Ingestion: May be harmful if swallowed. Ingestion may cause vomiting and headache.
Likely routes of exposure: Eyes, skin
Interactive effects: Not available

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:
 96h LC-50 (fish): 0.619-0.796 mg/L
 96h EC-50 (invertebrates): Not determined
 48h LC-50 (algae): Not determined
Persistence and degradability: Not determined.
Bioaccumulative potential: Not determined.
Mobility in soil: Soil mobility not determined. This product floats on water. This product is volatile and may spread in the atmosphere.
Other adverse effects: Very toxic to aquatic life with long-lasting effects. Avoid release to the environment. Collect spillage.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Do not dump into sewers, on the ground or into any waterways. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Very toxic to aquatic life with long-lasting effects. Avoid release to the environment. Collect spillage.
Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied. Do not cut, drill, grind or weld on or near the container.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable) (40 CFR 261.22).
Other: This product contains one or more substances that are listed with the State of California as a hazardous waste.

SECTION 14. TRANSPORT INFORMATION

United States DOT:
Container of 119 gallons or less:
 Combustible Liquid (49 CFR 173.120(b)(2): This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less for ground transportation. Exception CFR 173.150(f)(2): Combustible liquids. This exception does not apply to transportation by vessel or aircraft.
Container of 120 gallons or more:
 UN/ID No.: UN1993
 Proper Shipping Name: Flammable Liquids, n.o.s., (Terpene Hydrocarbons)
 Hazard Class: 3
 Packing Group: III
IATA and IMDG:
 UN/ID No.: UN1993
 Proper Shipping Name: Flammable Liquids, n.o.s., (Terpene Hydrocarbons)
 Hazard Class: 3
 Packing Group: III
 Marine Pollutant (IMDG Code): Not listed (49 CFR 172.101).
 Very toxic to aquatic life with long-lasting effects.
 Transportation in bulk (IMDG - Annex II of MARPOL 73/78 and IBC Code): Not offered in bulk for transport overseas.

SECTION 15. REGULATORY INFORMATION

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.
SARA Section 302: The components of this product are either not regulated or regulated, but present in negligible concentrations.
SARA TITLE III Section 311/312:

Immediate (Acute) Health	Yes	Fire Hazard	Yes
Delayed (Chronic) Health	No	Reactive Hazard	No

SARA Title 313: This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels (40 CFR 372).
CERCLA: This product does not have a reportable quantity.
United States Right-To-Know: None known.
Proposition 65: This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable) (40 CFR 261.22).

SECTION 16. OTHER INFORMATION

Date Prepared: November 9, 2016, version #3 – SDS updated to meet revision #5 GHS requirements.

Hazard Ratings (HMIS): Health 2, Flammability 2, Reactivity 0 (Scale 0 – 4). Personal Protection Rating to be supplied by user based on use conditions.

Carefully read all instructions on label before handling this product.

Keep out of reach of children.

“FOR INDUSTRIAL USE ONLY”

Abbreviation	Full Name/Explanation
ACGIH	American Conference of Government Industrial Hygienists
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CNS	Central Nervous System
CFR	Code of Federal Regulations
DOT	Department of Transportation
EC	Effective Concentration
HMIS	Hazardous Material Information System
IARC	International Agency for Research on Cancer
LC	Lethal Concentration
LD	Lethal Dose
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SE	Single Exposure
STEL	Short-Term Exposure Limit
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
VOC	Volatile Organic Compounds

The information contained herein is based on data available to us and is believed to be correct. We make no warranty, however, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.

Regulatory Standards: DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92.

SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)- INGREDIENTS LISTED. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Revised 4/1/91, 173.310.