



CITRUSoy® Super High Flash

Material Safety Data Sheet

Florida Chemical Company, Inc.

PRODUCT DATA

Preparation Date: November 2007

DESCRIPTION

CITRUSoy® Super High Flash is made from soy methyl ester and citrus fragrance components. It is an ideal natural solvent for high-temperature applications due to its high flash point (>200°F). It evaporates slowly and has excellent penetrating characteristics. This product has been awarded *Design for the Environment* recognition by the US-EPA and has very low VOC emissions.

CITRUSoy® Super High Flash is nonylphenol free (no NPE-surfactants), has no ozone-depleting chemicals (ODCs), no hazardous air pollutants (HAPs), and is readily biodegradable.

Specific formulation guidance and technical assistance is available.

USES & APPLICATIONS

CITRUSoy® Super High Flash is ideal for automotive, manufacturing, and printing industry uses. CITRUSoy® Super High Flash works well as a grease/lube remover, parts cleaner, blanket roller wash, ink carrier, offset/web press wash, screen printing ink wash, adhesive remover, and petroleum cleanup solvent. The product also works well as a corrosion inhibitor and can be made into numerous personal consumer care products.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: CITRUSoy® Super High Flash
Product Code: 909011
Issue Date: November 2007

Manufacturer: Florida Chemical Company, Inc.
Address: 351 Winter Haven Blvd., NE
Winter Haven, FL 33881-9432
(863)294-8483 (9 a.m. to 5 p.m ET)

**For emergencies, call Chemtrec anytime at 1-800-424-9300.
Outside US, call Chemtrec Collect at 703-527-3887.**

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview

Appearance/Odor: Yellow liquid with light, citrus aroma.

Slippery when spilled.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Eye contact, skin contact, inhalation.

Eye: Causes moderate to severe irritation.

Skin: May cause slight redness. Prolonged or repeated exposure may cause drying of the skin.

Inhalation: May cause nose, throat, and respiratory tract irritation, coughing, headache.

Ingestion: Not likely to be toxic, but may cause vomiting, headache, or other medical problems.

Medical Conditions Aggravated By Exposure: May irritate the skin of people with pre-existing skin conditions.

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, or NTP.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>% by Wt.</u>
Citrus Terpenes	94266-47-4	0-20
Methyl Soyate	67784-80-9	80-100

SECTION 4: FIRST AID MEASURES

Eye Contact: Remove contact lenses at once. Flush with water for at least 15 minutes. If irritation persists, seek medical attention.
 Skin Contact: Wash affected area with copious amounts of soap and water. If irritation develops, seek medical attention.
 Inhalation: Move to fresh air. If symptoms persist, seek medical attention.
 Ingestion: Seek medical attention immediately. DO NOT induce vomiting. Rinse mouth with water. DO NOT administer anything by mouth to an unconscious person.
 General: As with any chemical, employees should thoroughly wash hands with soap and water after handling this material.

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, foam or dry chemical. Caution: Carbon dioxide will displace air in confined spaces and may create an oxygen-deficient atmosphere.
 Unsuitable Extinguishing Media: Water.
 Products of Combustion: Forms acrid fumes, carbon monoxide, and carbon dioxide.
 Protection of Firefighters: Vapors may be irritating to eyes, skin, and respiratory tract. Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Product is slippery when spilled. Isolate the hazard area. Deny entry to unnecessary and unprotected personnel.
 Environmental Precautions: Keep out of drains, sewers, ditches, and waterways.
 Methods for Containment: Dike spill area and cap leaking containers as necessary to prevent further spreading of spilled material. Absorb spilled liquid with suitable material.
 Methods for Clean Up: Eliminate all ignition sources. Use equipment rated for use around combustible materials. Oil-soaked rags may spontaneously combust; place in appropriate disposal container.
 Other Information: There are no special reporting requirements for spills of this material.

SECTION 7: HANDLING AND STORAGE**Handling**

Keep away from heat, sparks, and flame. Open container slowly to release pressure caused by temperature variations. Do not allow this material to come in contact with eyes. Avoid prolonged contact with skin. Use in well-ventilated areas. Do not breathe vapors. As with any chemical, employees should thoroughly wash hands with soap and water after handling this material.

Storage

Product may be packaged in phenolic-lined, steel containers or fluorinated plastic containers. Store in well-ventilated area. Storage temperature should not exceed 160°F (71°C) for extended periods of time. Keep container closed when not in use. Air should be excluded from partially-filled containers by displacing with nitrogen or carbon dioxide. Do not cut, drill, grind, or weld on or near this container; residual vapors may ignite.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

Citrus Terpenes	8 h TWA = 30 ppm (AIHA Standard)
Methyl Soyate	N/E (N/E – Not Established)

Engineering Controls: Provide ventilation. Keep away from sparks and flames.

Eye/Face Protection: Wear safety glasses or goggles.

Skin Protection: Nitrile gloves are recommended. Boots, apron, or bodysuits should be worn as necessary.

Respiratory Protection: Not normally required. If adequate ventilation is unavailable, use NIOSH approved air-purifying respirator with organic vapor cartridge or canister.

General Hygiene Considerations: Wash hands thoroughly after handling. Have eyewash facilities immediately available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color: Colorless to straw yellow.
Odor: Light, citrus aroma.
Physical State: Liquid.
Boiling Point: >212 °F (>100 °C)
Specific Gravity: 0.87 to 0.89 @ 77°F (25 °C)
Vapor Pressure: <2 mmHg @ 68°F (20 °C)
Flash Point: >200°F (93.3 °C)
Solubility in Water: Insoluble.
Evaporation Rate: Estimated slower than ethyl ether.
Volatile Organic Compound (VOC) Content: 0-20 % by volume.

Note: These specifications represent a typical sample of this product, but actual values may vary. Certificates of Analysis and Specification Sheets are available upon request.

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.
Conditions to Avoid: Keep away from heat, sparks, and flames.
Incompatible Materials: Strong oxidizing agents and strong acids, including acidic clays, peroxides, halogens, vinyl chloride, and iodine pentafluoride.
Hazardous Decomposition Products: Oxides of citrus terpenes, which can result from improper storage and handling, are known to cause skin sensitization.
Possibility of Hazardous Reactions: BHT, an antioxidant, has been added to prevent oxidation. Avoid long-term exposure to air. If storing partially-filled container, fill headspace with an inert gas such as nitrogen or carbon dioxide. Hydrolysis of this product will produce methanol.

SECTION 11: TOXICOLOGICAL INFORMATION**Acute Effects**

Methyl soyate has been shown to have low oral toxicity ($LD_{50} > 5$ g/kg) when tested on rats and low dermal toxicity ($LD_{50} > 2$ g/kg) when tested on rabbits. Citrus terpenes have been shown to have low oral toxicity ($LD_{50} > 5$ g/kg) and low dermal toxicity ($LD_{50} > 5$ g/kg) when tested on rabbits. Citrus terpenes also showed low toxicity by inhalation ($RD_{50} > 1$ g/kg) when tested on mice. Product may be a skin and eye irritant. Inhalation may cause irritation of the nose, throat, and respiratory tract.

Chronic Effects

This product is not classified as a carcinogen by OSHA, IARC or NTP. This product has not been shown to produce genetic changes when tested on bacterial or animal cells. This product does not contain known reproductive or developmental toxins. Prolonged or repeated exposure can cause drying or dermatitis of skin. Improper storage and handling may lead to the formation of a possible skin sensitizer.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: There is no information available at this time for this product. However, a spill may produce significant toxicity to aquatic organisms and ecosystems. Some studies have shown that certain bacteria and fungi have the ability to degrade terpenes, decreasing their toxicity to fish. When spilled, this product may act as an oil, causing a film, sheen, emulsion or sludge at or beneath the surface of a body of water.

Persistence/Degradability: Product is expected to be readily biodegradable.

Bioaccumulation/Accumulation: No appreciable bioconcentration is expected in the environment.

Mobility in Environment: Citrus terpenes volatilize rapidly.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal: Incinerate or dispose of in accordance with Local, State, and Federal Regulations. Taking regulations into consideration, waste may be incinerated or handled through EPA Spill Control Plan via landfill or dilution. Empty containers must be triple-rinsed prior to disposal. Oil-soaked rags should be disposed of properly to prevent spontaneous combustion.

SECTION 14: TRANSPORT INFORMATION

TDG Status: Not Hazardous
IMO Status: Not Hazardous
IATA Status: Not Hazardous

The listed transportation classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptions.

SECTION 15: REGULATORY INFORMATION**Global Inventories**

The components of this product are included in the following inventories:

USA (TSCA)
Canada (DSL)
Australia (AICS)
Europe (EINECS)
Korea (KECL)

Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

SARA Title III (Section 313)

This substance contains no materials subject to the reporting requirements of SARA Title III (Section 313).

SECTION 16: OTHER INFORMATION

NFPA 704: National Fire Protection Association
Health – 1 Fire – 1 Reactivity – 0

Legend

OSHA – United States Occupational Safety and Health Administration
IARC – International Agency for Research on Cancer
NTP – National Toxicology Program
NIOSH – National Institute for Occupational Safety and Health
BHT – Butylated Hydroxytoluene
EPA – United States Environmental Protection Agency

Caution: The user should conduct his/her own experiments and establish proper procedures and control before attempting use on critical parts.

Prepared by Florida Chemical Company Technical Team.

The information contained herein is based on current knowledge and experience: no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information obtained by the user. No warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment. This information is furnished upon the condition the person receiving it shall determine the suitability for the particular purpose. This MSDS is to be used as a guideline for safe work practices and emergency response.