

Citrus Burst®



Material Safety Data Sheet

Florida Chemical Company, Inc.

PRODUCT DATA

Preparation Date: October 2006

DESCRIPTION:

Citrus Burst® 1 is a concentrated blend of d-Limonene, citrus components, and surfactants. It is ideally suited for general purpose cleaners and degreasers. This product can be diluted to formulate multiple household and industrial cleaning products. It dilutes to a milky white emulsion and blends well with other ingredients to make more complex product formulations.

Citrus Burst® 1 is designed to make formulating new products easier and to reduce unnecessary ingredient inventories. Citrus Burst® 1 is formulated with the environment in mind and is nonylphenol free (no NP-surfactants), has no ozone depleting chemicals (ODC), and no hazardous air pollutants (HAP).

Specific formulation guidance and technical assistance is available.

USES & APPLICATIONS

Replacement for toxic chlorinated solvents, glycol ether, MEK (methyl ethyl ketone), xylene, Freon, and CFC. Ideal for formulating parts cleaner, engine degreaser, automotive cleaner, institutional cleaners, tar and asphalt remover, grease trap maintainer, lift station and sewage treatment additive, floor cleaner, ink cleaner, metal cleaner, and fragrance/odorant additive.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Citrus Burst® 1
Product Code: 901111
Issue Date: October 15, 2006

Manufacturer: Florida Chemical Company
Address: 351 Winter Haven Blvd., NE
Winter Haven, FL 33881-9432
(863) 294-8483
(9:00 A.M. to 5:00 P.M. Eastern)

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: Colorless to amber liquid with a mild underlying citrus aroma.

Product is Combustible.

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.

OSHA Regulatory Status

This material is combustible, which is defined as having a flash point between 100°F (37.8°C) and 200°F (93.3°C). Combustible materials are hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Florida Chemical Company, Inc.

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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 | 30 - 70 |
| Nonionic Surfactant | 61791-12-6 | 0 - 40 |
| Nonionic Surfactant | 68131-39-5 | 0 - 40 |
| Water | 7732-18-5 | 0 - 10 |

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 acid 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. 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 flashpoint 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 | 8h TWA= 30ppm (AIHA Standard) |
| Nonionic Surfactant | N/E (N/E - Not Established) |
| Nonionic Surfactant | N/E |
| Water | N/E |

TWA –Time Weighted Average

| | |
|---------------------------------|--|
| 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 available. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color: Colorless to amber liquid.

Aroma: Citrus aroma.

Physical State: Liquid.

Boiling Point: 310°F to 332°F (154°C to 167°C)

Specific Gravity: 0.891 to 0.902 @ 68°F (20°C)

Vapor Pressure: <2mmHg @ 68°F (20°C)

Flash Point: 124°F (51.1°C)

Flammable Limits: LEL approx. 0.7%, UEL approx. 6.1% (For primary component).

Solubility in Water: Forms emulsion.

Evaporation Rate: Medium to fast.

Volatile organic compound (VOC) content: 60 to 95% 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.

SECTION 11: TOXICOLOGICAL INFORMATION**Acute Effects**

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. Commercially clean containers prior to disposal. Oil soaked rags should be disposed of properly to prevent spontaneous combustion.

SECTION 14: TRANSPORT INFORMATION**US DOT Shipping Classification**

Proper Shipping Name: TERPENE HYDROCARBONS, N.O.S

Hazard Class: 3

Identification No.: UN2319

Packing Group: III

Label/Placard: exception §173.150(f) applies.

continued on page 4

SECTION 14: TRANSPORT INFORMATION, continued from page 3

TDG Status: Hazardous
IMO Status: Hazardous
IATA Status: 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)
Europe (EINECS/ELINCS/Polymer/NLP)
Australia (AICS)
Korea (KECL)
Philippines (PICCS)

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 (slight hazard) Fire – 2 (moderate hazard) Reactivity – 0 (minimal hazard)

PACKAGING

Citrus Burst® 1 is packaged in epoxy-lined containers as follows:

| | | |
|----------------|-----------------------|--------------------|
| 1-Gallon Pail | 7.4 Pounds Net Weight | 3.4 kg Net Weight |
| 5-Gallon Pail | 37 Pounds Net Weight | 16.8 kg Net Weight |
| 55-Gallon Drum | 408 Pounds Net Weight | 185 kg Net Weight |

Citrus Burst® 1 may be packaged in phenolic-lined containers or fluorinated plastic containers. Drums are typically orange or black DOT approved steel drums coated with a phenolic resin liner. Dimensions of 55-gallon drums are: diameter 23” and height 35”. Sample quantities (pints) are packaged in fluorinated plastic containers or glass (1 oz. samples).

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.
