

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 985  
**Product name** Fred's Citrus Clean  
**Effective date** 14-Nov-2007  
**Company information** Fred's Fine Cleaning Center  
31320 Via Colinas, Suite #105  
Westlake Village, CA 91361  
General Assistance 1-818-706-FRED  
**Company phone**  
**Emergency telephone US** 800-424-9300  
**Emergency telephone outside US** 703-527-3887  
**Supersedes date** 14-Jun-2007

## 2. Hazards Identification

**Emergency overview** CONTENTS UNDER PRESSURE.  
Aerosol. Pressurized container may explode when exposed to heat or flame.  
  
Prolonged exposure may cause chronic effects.

**OSHA regulatory status** This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

**Potential health effects**

**Skin** Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

**Inhalation** Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

**Ingestion** Exposure by ingestion of an aerosol is unlikely. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Target organs** Central nervous system.

**Chronic effects** May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage.

**Signs and symptoms** Narcosis. Defatting of the skin. Irritation.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Propane	74-98-6	3 - 5
n-Butane	106-97-8	3 - 5
Non-hazardous and other components below reportable levels		> 90

## 4. First Aid Measures

**First aid procedures**

**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 or persists.

**Skin contact** Immediately take off all contaminated clothing. Wash off with warm water and soap. Get medical attention if irritation develops or persists.

**Inhalation** Call a physician if symptoms develop or persist.

**Ingestion** Rinse mouth. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. If ingestion of a large amount does occur, seek medical attention.

**Notes to physician** Symptoms may be delayed.

**General advice** If you feel unwell, seek medical advice (show the label where possible).

## 5. Fire Fighting Measures

**Flammable properties** Containers may explode when heated. Vapor or gas may spread to distant ignition sources and flash back.

## Extinguishing media

**Suitable extinguishing media** Large Fires: Water spray, fog or regular foam.

Small Fires: Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

## Protection of firefighters

**Protective equipment and precautions for firefighters** In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## 6. Accidental Release Measures

**Personal precautions** Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.

**Methods for containment** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable.

**Methods for cleaning up** Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

## 7. Handling and Storage

**Handling** Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure.

**Storage** Level 1 Aerosol.

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat, sparks, and flame. Avoid exposure to long periods of sunlight. Store in cool place. Keep the container dry. Keep out of the reach of children. Use care in handling/storage.

## 8. Exposure Controls / Personal Protection

### Exposure limits

#### ACGIH

Components	CAS #	TWA	STEL	Ceiling
Propane	74-98-6	1000 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established

#### OSHA

Components	CAS #	TWA	STEL	Ceiling
Propane	74-98-6	1000 ppm	Not established	Not established

**Engineering controls** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### Personal protective equipment

**Eye / face protection** Not normally needed.

**Skin protection** Protective gloves. Not normally needed.

**Respiratory protection** No personal respiratory protective equipment normally required.

**General hygiene considerations** When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical & Chemical Properties

**Appearance** Compressed liquefied gas.

**Color** White.

**Odor** fruity

**Physical state** Liquid.

<b>Form</b>	Aerosol.
<b>Flammability (HOC)</b>	4.4026 kJ/g estimated
<b>Flash back</b>	No
<b>Pressure</b>	50 - 60 psig @ 70F
<b>Solubility</b>	Partially
<b>Flash point</b>	-156 °F (-104.4 °C) estimated
<b>Boiling point</b>	201.2 °F (93.9 °C) estimated
<b>Specific gravity</b>	0.9526 estimated
<b>pH</b>	11.49 - 12.49

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Risk of ignition. Stable at normal conditions.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	May include oxides of nitrogen.

## 11. Toxicological Information

<b>Acute effects</b>	Acute LD50: 65442 mg/kg estimated, Rat, Oral Acute LD50: 42105 mg/kg estimated, Rat, Dermal
<b>Sensitization</b>	Not expected to be hazardous by OSHA criteria.
<b>Local effects</b>	Components of the product may be absorbed into the body through the skin.
<b>Chronic effects</b>	Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.
<b>Neurological effects</b>	Hazardous by OSHA criteria.
<b>Mutagenicity</b>	Not expected to be hazardous by OSHA criteria.
<b>Reproductive effects</b>	Not expected to be hazardous by OSHA criteria.
<b>Teratogenicity</b>	Not expected to be hazardous by OSHA criteria.
<b>Epidemiology</b>	Not expected to be hazardous by OSHA criteria. Hazardous by OSHA criteria.
<b>Further information</b>	Symptoms may be delayed.

## 12. Ecological Information

<b>Ecotoxicity</b>	LC50 11890 mg/L, Fish, 96.00 Hours, EC50 49786 mg/L, Daphnia, 48.00 Hours, IC50 11489 mg/L, Algae, 72.00 Hours, Components of this product have been identified as having potential environmental concerns.
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## 13. Disposal Considerations

<b>Waste codes</b>	D001: Waste Flammable material with a flash point <140 F
<b>Disposal instructions</b>	Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

## 14. Transport Information

### Department of Transportation (DOT) Requirements

#### Basic shipping requirements:

**Proper shipping name** Consumer commodity

**Hazard class** ORM-D

**Subsidiary hazard class** None

#### Additional information:

**Packaging exceptions** 156, 306

**Packaging non bulk** 156, 306

**Packaging bulk** None

**IMDG****Basic shipping requirements:**

**Proper shipping name** AEROSOLS, flammable  
**Hazard class** 2.1  
**UN number** 1950  
**Additional information:**  
**Item** 5F  
**Labels required** 2.1  
**Transport Category** 2

**IATA****Basic shipping requirements:**

**Proper shipping name** Aerosols, flammable  
**Hazard class** 2.1  
**UN number** 1950



<b>15. Regulatory Information</b>
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**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

**Occupational Safety and Health Administration (OSHA)**

**29 CFR 1910.1200 hazardous chemical** Yes

**CERCLA (Superfund) reportable quantity**

None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

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

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (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)	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)

**State regulations****U.S. - Pennsylvania - RTK (Right to Know) List**

n-Butane	106-97-8	Present
Propane	74-98-6	Present

<b>16. Other Information</b>
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**HMIS® ratings**

Health: 1  
 Flammability: 2  
 Physical hazard: 0  
 Personal protection: X

**Prepared by**  
**Disclaimer**

Regulatory Compliance

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Issue date**

14-Nov-2007