



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 891
Product name Orange Power Heavy Duty Degreaser
Effective date 08-May-2008
Company information Claire Manufacturing
500 Vista Ave.
Addison, IL 60101 United States
Company phone General Assistance 630-543-7600
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Version # 03
Supersedes date 08-May-2008

2. Hazards Identification

Emergency overview CONTENTS UNDER PRESSURE.
Aerosol. Pressurized container may explode when exposed to heat or flame.

OSHA regulatory status Prolonged exposure may cause chronic effects.
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Skin contact. Ingestion.

Eyes Health injuries are not known or expected under normal use.

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. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs Central nervous system. Lungs.

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. May cause delayed lung damage.

Signs and symptoms Discomfort in the chest. Narcosis. Defatting of the skin. Irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
d-Limonene	5989-27-5	10 - 15
n-Butane	106-97-8	10 - 15
Synthetic Isoparaffinic Hydrocarbon	64742-47-8	8 - 10
Odorless Mineral Spirits	64742-48-9	5 - 8
Propane	74-98-6	3 - 5
Polyethylene Glycol Nonylphenol Ether	9016-45-9	3 - 5
Non-hazardous and other components below reportable levels		40 - 60

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. Continue rinsing. 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

Move to fresh air. If symptoms persist, get medical attention.

Ingestion

If material is ingested, immediately contact a poison control center. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. Fire Fighting Measures

Flammable properties

Containers may explode when heated. Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media**Suitable extinguishing media**

Polymer foam. Dry chemical powder. Carbon dioxide (CO₂). Do not use water jet.

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.

Environmental precautions

Do not contaminate water.

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. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

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. Do not reuse the empty container. Do not use if spray button is missing or defective. Use only with adequate ventilation. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid release to the environment. 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. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Avoid exposure to long periods of sunlight. Keep out of the reach of children. Use care in handling/storage. Level 1 Aerosol (NFPA 30B) Do not store, incinerate, or heat this material above 120 degrees Fahrenheit.

8. Exposure Controls / Personal Protection

Exposure limits**ACGIH****Components****CAS #****TWA****STEL****Ceiling**

n-Butane

106-97-8

1000 ppm

Not established

Not established

Propane

74-98-6

1000 ppm

Not established

Not established

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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**

Wear chemical goggles.

Skin protection

Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing. Not normally needed.

Respiratory protection

No personal respiratory protective equipment normally required. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties**Appearance**

Aerosol.

Boiling point

197.6 °F (92.2 °C) estimated

Color

milky white

Flammability (HOC)

19.2152 kJ/g estimated

Flash back

No

Flash point

-156 °F (-104.4 °C) estimated

Form

Aerosol.

Odor

fruity

pH

10 - 11

Physical state

Liquid.

Pressure

35 - 45 psig @70F

Solubility

Partially

Specific gravity

0.8465 estimated

10. Chemical Stability & Reactivity Information**Conditions to avoid**

Heat, flames and sparks.

Hazardous decomposition products

No hazardous decomposition products are known.

11. Toxicological Information**Acute effects**

Acute LD50: 7386 mg/kg estimated, Rat, Dermal

Sensitization

Not expected to be hazardous by OSHA criteria.

Local effects

Components of the product may be absorbed into the body through the skin.

Chronic effects

Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.

Reproductive effects

Not expected to be hazardous by OSHA criteria.

Teratogenicity

Not expected to be hazardous by OSHA criteria.

12. Ecological Information**Ecotoxicity**

Components of this product have been identified as having potential environmental concerns.

LC50 435 mg/L estimated, Fish, 96.00 Hours,
EC50 32552 mg/L estimated, Daphnia, 48.00 Hours,
IC50 7512 mg/L estimated, Algae, 72.00 Hours,

Environmental effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Disposal Considerations**Waste codes**

D001: Waste Flammable material with a flash point <140 F

Disposal instructions

Contents under pressure. Dispose of this material and its container at hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. 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

Hazard class 2.1

UN number 1950

Additional information:

Packaging exceptions LTD QTY

Labels required None

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

Proper shipping name Aerosols, flammable

Hazard class 2.1

UN number 1950

Additional information:

Packaging exceptions LTD QTY

Labels required None

**15. Regulatory Information****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.

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 - Yes
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

16. Other Information**Further information**

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 1
Flammability: 2
Physical hazard: 0

Prepared by

Regulatory Compliance

Disclaimer

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

08-May-2008

MSDS sections updated

This document has undergone significant changes and should be reviewed in its entirety.