



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 077
Product name **Silicone Release Agent**
Effective date 12-Nov-2007
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
Supersedes date 28-Aug-2007

2. Hazards Identification

Emergency overview EXTREMELY FLAMMABLE
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

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

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

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Prolonged inhalation may be harmful. Do not breathe dust/fume/gas/mist/vapors/spray.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage.

Target organs Central nervous system. Respiratory 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. May cause delayed lung damage.

Signs and symptoms Discomfort in the chest. Narcosis.

3. Composition / Information on Ingredients

Components	CAS #	Percent
n-Butane	106-97-8	30 - 40
n-Pentane	109-66-0	20 - 30
Synthetic Isoparaffinic Hydrocarbon	64741-66-8	15 - 20
Propane	74-98-6	10 - 15
Non-hazardous and other components below reportable levels		2.5 - 10

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 immediately.

Skin contact Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Ingestion

Rinse mouth. Do not induce vomiting without medical advice. 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.

Notes to physician

Symptoms may be delayed.

General advice

Call a physician if symptoms develop or persist.

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**

Water fog. Foam. Dry chemical. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters**Specific hazards arising from the chemical**

Fire may produce irritating, corrosive and/or toxic gases.

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.

Specific hazards

Fire may produce irritating, corrosive and/or toxic gases.

6. Accidental Release Measures

Personal precautions

Ensure adequate ventilation. 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. Do not use if spray button is missing or defective. Use only with adequate ventilation. Avoid prolonged exposure.

Storage

Level 3 Aerosol.

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Avoid exposure to long periods of sunlight. Keep in an area equipped with sprinklers. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

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

n-Butane

106-97-8

1000 ppm

Not established

Not established

n-Pentane

109-66-0

600 ppm

Not established

Not established

Propane

74-98-6

1000 ppm

Not established

Not established

OSHA**Components****CAS #****TWA****STEL****Ceiling**

n-Pentane

109-66-0

1000 ppm

Not established

Not established

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	Wear chemical goggles.
Skin protection	Protective gloves. Wear chemical protective equipment that is specifically recommended by the manufacturer.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Color	Colorless.
Odor	Solvent.
Physical state	Liquid.
Form	Aerosol.
Flammability (HOC)	40.91 kJ/g estimated
Flash back	Yes
Pressure	30 - 40 psig @ 70F
Solubility	Negligible
Flash point	-156 °F (-104.4 °C) estimated
Boiling point	62.6 °F (17.2 °C) estimated
Specific gravity	0.6124 estimated
pH	Not applicable

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition. Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	May include oxides of nitrogen.

11. Toxicological Information

Acute effects	Acute LD50: 37594 mg/kg estimated, Rat, Oral Acute LD50: 5424 mg/kg estimated, Rat, Dermal Acute LC50: 27 mg/l/4h estimated, Rat, Inhalation
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.
Neurological effects	Hazardous by OSHA criteria.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicity	LC50 36.52 mg/L, Fish, 96.00 Hours, EC50 14.61 mg/L, Daphnia, 48.00 Hours, Components of this product have been identified as having potential environmental concerns.
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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 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:

Packaging exceptions	LTD QTY
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

Additional information:

Packaging exceptions	LTD QTY
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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.

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 - Yes
Delayed Hazard - Yes
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)	Yes
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)	Yes
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
n-Pentane	109-66-0	Present
Propane	74-98-6	Present

16. Other Information**HMIS® ratings**

Health: 1*
Flammability: 4
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

12-Nov-2007