

Revision Date: 12/20/2006

Issue date: 06/07/2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE® FREEZE & RELEASE Part No. 996456 Product Use: Lubricant Company address: Henkel Canada, Inc. 2225 Meadowpine Boulevard Mississauga, Ontario L5N 7P2	Item No. : 996456 / IDH No. 996456 Region: Canada Contact Information: Telephone: 905.814.6511 Emergency telephone: 905.814.6511 Internet: www.loctite.com
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2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
1,1,1,2-Tetrafluoroethane 811-97-2	30-60	None	None	AEL- 1000 ppm 8 & 12 hour TWA. WEEL 1000 ppm 8 & 12 hour TWA (AIHA), 1000 ppm TWA, (WEEL)
Naphtha, petroleum, hydrotreated, light 64742-49-0	10-30	None	None	None
Butane 106-97-8	10-30	1000 ppm TWA	800 ppm TWA	None
Kerosene 8008-20-6	5-10	200 mg/m ³ TWA application restricted to conditions in which there are negligible aerosol exposures (skin)	None	None
Isobutane 75-28-5	1-5	1000 ppm TWA	None	None

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Aerosol	WHMIS hazard class:	A, B.2, D.2.B
Color:	Yellow		
Odor:	Characteristic		

DANGER: EXTREMELY FLAMMABLE.
 CONTENTS UNDER PRESSURE.
 MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.
 MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Eyes, Inhalation, Skin

Potential Health Effects

Inhalation:	Vapor overexposure may cause drowsiness. Prolonged or excessive inhalation may cause respiratory tract irritation.
Skin contact:	Mild skin irritation. Harmful if absorbed through skin.
Eye contact:	May cause irritation.
Ingestion:	Not expected under normal conditions of use.

Existing conditions aggravated by exposure: Not available

See Section 11 for additional toxicological information.

4. FIRST AID MEASURES

Inhalation:	Remove to fresh air. If symptoms develop and persist, get medical attention.
Skin contact:	Wash affected area immediately with soap and water. Get medical attention if symptoms develop and persist.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. Aspiration may cause pulmonary edema and pneumonitis. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Flash point:	-60°C (-75.8°F)
Autoignition temperature:	510°C (949.7°F)
Flammable/Explosive limits-lower %:	1.4
Flammable/Explosive limits-upper %:	32
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special fire fighting procedures:	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA). Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.
Unusual fire or explosion hazards:	Do not puncture or incinerate pressurized containers. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon.
Sensitivity to mechanical impact:	Not available.
Sensitivity to static discharge:	Not available.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions:	Prevent product from entering drains or open waters.
Clean-up methods:	Wipe up with adsorbent material (e.g. cloth, fleece). Rinse spill area with water. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Handling:	Keep away from heat, spark and flame. Avoid contact with eyes, skin and clothing. Do not breathe mist or vapors.
Storage:	Keep in a cool, well ventilated area. Store away from heat, sparks, flames, or other sources of ignition. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst.
Incompatible products:	None.

For information on product shelf life contact Loctite Canada Customer Service at (905) 814-6511.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.
Respiratory protection:	When workplace hazards warrant the use of a respirator, appropriate respirators must be used, and a program that follows 29 CFR 1910.134 must be followed.
Skin protection:	Chemical resistant, impermeable gloves.

Eye/face protection: Safety goggles or safety glasses with side shields.

See Section 2 for exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Aerosol
Color:	Yellow
Odor:	Characteristic
Odor Threshold:	Not available
Vapor pressure:	Not available
pH:	Not applicable
Boiling point/range:	Not available
Melting point/range:	Not available
Specific gravity:	Not available
Vapor density:	Not available
Evaporation rate:	Not available
Solubility in water:	Insoluble.
Partition coefficient (n-octanol/water):	Not available
VOC content:	<50 %; 423g/L grams/liter

10. STABILITY AND REACTIVITY

Stability:	Stable.
Hazardous polymerization:	Will not occur.
Hazardous decomposition products:	Carbon oxides.
Incompatibility:	Oxidizing agents.
Conditions to avoid:	Extremes of temperature and direct sunlight.

11. TOXICOLOGICAL INFORMATION

Product toxicity data:	Not available
Toxicologically synergistic products:	Not available.

Refer to the following for Irritancy of Product, Sensitization to Product, Carcinogenicity, Reproductive Toxicity, Teratogenicity, and Mutagenicity.

Ingredient Toxicity Data & Carcinogen Status

Hazardous components	LD50s & LC50s	Other LD50s and LC50s	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen	ACGIH - Carcinogens
1,1,1,2-Tetrafluoroethane 811-97-2	Inhalation LC50 (Rat) = 1500 g/m ³	None	No	No	No	No
Naphtha, petroleum, hydrotreated, light 64742-49-0	Inhalation LC50 (Rat) = 73680 ppm Dermal LD50 (Rabbit) > 3160 mg/kg Oral LD50 (Rat) > 5000 mg/kg	None	No	No	No	No
Butane 106-97-8	Inhalation LC50 (Rat) = 658 g/m ³	None	No	No	No	No
Kerosene 8008-20-6	Dermal LD50 (Rabbit) > 2000 mg/kg Inhalation LC50 (Rat) > 5.28 mg/L Oral LD50 (Rat) > 5000 mg/kg	None	No	No	No	A3 - Confirmed animal carcinogen with unknown relevance to humans (as total hydrocarbon vapor)
Isobutane 75-28-5	Inhalation LC50 (Rat) = 658 mg/L	None	No	No	No	No

Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
1,1,1,2-Tetrafluoroethane 811-97-2	Cardiac, Central nervous system, Irritant, Respiratory, Skin
Naphtha, petroleum, hydrotreated, light 64742-49-0	Irritant, Central nervous system, Kidney, Lung
Butane 106-97-8	Cardiac, Central nervous system, Irritant
Kerosene 8008-20-6	Spleen, Lung, Liver, Kidney, Irritant, Central nervous system, Bone Marrow, Blood
Isobutane 75-28-5	Cardiac, Central nervous system, Lung

12. ECOLOGICAL INFORMATION

Ecological information: Toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of in accordance with federal and local regulations.

14. TRANSPORT INFORMATION

Canada Transportation of Dangerous Goods - Ground:

Proper shipping name: Aerosols, flammable
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None
Exceptions: May qualify as a Consumer Commodity or Limited Quantity. Refer to TDG regulations.

International Air Transportation (ICAO/IATA):

Proper shipping name: Aerosols, flammable
Hazard class or division: 2.1
Identification number: UN1950

Item No. : 996456 / IDH No. 996456

Product name: LOCTITE® FREEZE & RELEASE Part No. 996456

Packing group: None
Exceptions: May Qualify as Consumer Commodity ID8000 (Not more than 500mL)

WaterTransportation (IMO/IMDG):

Proper shipping name: Aerosols, flammable
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None
Marine pollutant: None
Exceptions: Limited quantity (Not more than 1 L)

15. REGULATORY INFORMATION

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Domestic Substances List.

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: First Issue

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Product Regulations.

Prepared by: C.J. Michaels, Manager, Regulatory Affairs

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