



Material Safety Data Sheet

Section 1 3/4 Chemical Product And Company Identification

Manufacturer: LHB Industries Emergency Telephone Number (800) 424-9300 (Chemtrec)
8833 Fleischer Place Information Telephone Number (314) 423-4333
Berkeley, MO 63134 Date of Preparation May 28, 2003

Product ID: Skilcraft Power Duster, 10 oz Aerosol
Specification: N/A
LHB Part Number: 0894----002
National Stock Number: 7930-01-398-2473
CAGE Code: OFFT5
Contract No.: N/A

Section 2 3/4 Composition / Information On Ingredients

CAS No.	Ingredient	Wt%	ACGIH TLV <STEL>	OSHA PEL <STEL>
811-97-2	1,1,1,2-Tetrafluoroethane (HFC-134a)	100.00	NE	NE

Section 3 3/4 Hazards Identification

Emergency Overview

WARNING!

Liquid and gas under pressure, overheating and overpressurizing may cause gas release or rupturing of container. May decompose on contact with flames or extremely hot metal surfaces to produce toxic and corrosive products. Vapor reduces oxygen available for breathing and is heavier than air. Harmful if inhaled and may cause heart irregularities, unconsciousness or death. Liquid contact with eyes or skin may cause frostbite.

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. As with most liquefied gases, contact with rapidly volatilizing liquid or cold vapor can cause frostbite to any tissue. High vapor concentrations are irritating to the eyes and respiratory tract and may result in central nervous system effects such as headache, dizziness, anesthesia, drowsiness, and in severe exposure, loss of consciousness and death. The dense vapor of this material may reduce the available oxygen for breathing and produce symptoms such as headache, dizziness, drowsiness, cyanosis and lack of muscle control followed by collapse. Prolonged exposure to an oxygen-deficient atmosphere may be fatal. Inhalation of this material may cause an increase in the sensitivity of the heart to adrenaline, which could result in irregular or rapid heartbeats and reduced heart function. Workers with heart disease or compromised heart function should limit exposure to this material.

Section 4 3/4 First Aid Measures

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Get medical attention. Do not give adrenaline, epinephrine or similar drugs following exposure to this product.

SKIN CONTACT: Flush exposed skin with lukewarm water (not hot), or use other means to warm skin slowly.

Get medical attention if frostbitten by liquid or if irritation occurs.

EYE CONTACT: Immediately flush eyes with plenty of water and get medical attention after flushing.

INGESTION: Not applicable - product is gas at ambient temperatures

Section 5 3/4 Fire Fighting Measures

FLASH POINT NA - Gas LEL: NA UEL: NA
EXTINGUISHING MEDIA: Use extinguishing media appropriate to the surrounding fire conditions.
SPECIAL EXPOSURE HAZARDS: Do not expose to temperatures over 120°F. Keep away from heat, sparks and flame. Containers may explode when exposed to extreme heat. Applications to hot surfaces require special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL PROTECTIVE EQUIPMENT: Water may be used to keep fire-exposed containers cool. Fire fighters should wear full protective clothing, including self-contained breathing equipment.
NFPA RATING: HEALTH 2, FLAMMABILITY 0, REACTIVITY 0
HMS CLASSIFICATION: HEALTH 2, FLAMMABILITY 0, REACTIVITY 0

Section 6 3/4 Accidental Release Measures

PERSONAL PRECAUTIONARY MEASURES: Avoid inhalation. Use good ventilation. Read entire label before using and follow all label directions.

ENVIRONMENTAL PRECAUTIONARY PROCEDURE FOR CLEANING/ABSORPTION: Evacuate enclosed spaces and disperse gas with floor-level forced-air ventilation. Exhaust vapors outdoors. Do not smoke or operate internal combustion engines. Remove flames and heating elements.

Section 7 3/4 Handling and Storage

HANDLING: Keep out of reach of children. Keep away from heat sparks, and open flame. During use and until all vapors are gone: Keep area ventilated. Contents under pressure. Do not puncture, incinerate, or expose to temperatures above 120°F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally.

STORAGE: CATEGORY – NFPA 30B Level 1 Aerosol

Do not store where temperatures may exceed 120°F (48.9°C).

Section 8 3/4 Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Local Exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, and 1910.108.

RESPIRATORY PROTECTION: If personal exposure cannot be controlled to below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

GLOVES: None required for aerosol products where a minimal skin contact is expected. For long or repeated contact wear chemical resistant gloves.

SKIN PROTECTION: Impervious clothes to protect skin. Wash promptly when skin becomes contaminated.

EYES: Safety glasses with side shields or chemical goggles.

OTHER PERSONAL PROTECTION DATA: Use only with adequate ventilation. Avoid contact with skin and eyes. Wash hands after using.



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Section 9 3/4 Physical and Chemical Properties

PHYSICAL STATE:	Liquefied gas
COLOR:	Colorless
ODOR:	faint ether
SPECIFIC GRAVITY:	1.21 @77°F
DENSITY:	10.09 lb/gal
VAPOR PRESSURE	96.16 psia @ 77°F
VAPOR DENSITY (AIR=1)	3.25 (Heavier than Air)
SOLUBILITY IN WATER:	Slight

Section 10 3/4 Stability and Reactivity

CHEMICAL STABILITY:	Stable
HAZARDOUS POLYMERIZATION:	Will not occur
CONDITIONS TO AVOID:	Do not expose to heat or store at temperature above 120°F
MATERIAL TO AVOID:	Strong alkalis or alkaline earth metals, finely powdered metals such as aluminum, magnesium or zinc and strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS:	Hydrogen fluoride, hydrogen chloride, carbon monoxide carbon dioxide and chlorine.

Section 11 3/4 Toxicological Information

No allergic skin response was observed in guinea pig following repeated skin exposure to this material. Inhalation of very high concentrations (generally exceeding 50000 ppm) produces a rapid anesthetic effect in mice, dogs, cats, and monkeys. No toxic effects were observed in rats exposed 6 hours/day, 5 days/week for 13 weeks to this material with concentrations up to 50000 ppm. No toxic effects and no tumors were observed in an oral dose study of rats given corn oil solutions of this material at 300 mg/kg/day for 1-year followed by lifetime observation. Long-term inhalation (2 year) of high concentrations (50000 ppm) caused an increase in benign tumors of testes in rats. This material was negative in the mouse dominant lethal assay. No birth defects were noted in rats and rabbits exposed to this material by inhalation during pregnancy. This material produced no genetic changes in standard tests using animals (in vivo tests) and animal or bacterial cells. Metabolism studies in rats exposed by oral and inhalation routes show that this material is not metabolized or accumulated in the body to any significant extent and are rapidly eliminated in the exhaled air. Single exposure (acute) studies indicate:

Inhalation: Practically non-toxic to Rats (4-hr LC50>500,000 ppm; 30-min LC50~750,000 ppm)
Eye Irritation: Slightly irritating to Rabbits
Skin Irritation: Slightly irritating to rabbits (24-hr exposure)

Section 12 3/4 Ecological Information

ECOLOGICAL INFORMATION: No data available

Section 13 3/4 Disposal Considerations

DISPOSAL OF WASTE METHOD: Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section 14 3/4 Transport Information

U.S. DOT: 49 CFR 172.101 Hazardous Materials Table

PROPER SHIPPING NAME:	Consumer Commodity
HAZARD CLASS OR DIVISION:	ORM-D
IDENTIFICATION NUMBER:	None
PACKING GROUP:	None

ATA: List of Dangerous Goods

PROPER SHIPPING NAME:	Aerosols, non-flammable
HAZARD CLASS OR DIVISION:	2.2
IDENTIFICATION NUMBER:	UN1950
PACKING GROUP	-

Section 15 3/4 Regulatory Information

U.S. REGULATORY RULES

SARA SECTION 302	None
SARA 313 CHEMICALS	None
CALIFORNIA PROPOSITION 65	None
RCRA STATUS	This material is classified as a hazardous waste.
TSCA CERTIFICATION	All chemicals in this product are listed, or are exempt from listing on the TSCA Inventory.

VOC CONTENT 0% by wt, 0 g/L

HAZARDOUS AIR POLLUTANTS (Clean Air Act, Section 112(b))

HAPS (lbs/gal)	None
HAPS (lbs/gal of Solids)	None
HAPS (lbs/lb of Solids)	None

Section 16 3/4 Other Information

REVISION NUMBER: 03

ADDITIONAL INFORMATION: This MSDS is prepared in accordance with FED-STD-313D and meets the requirements of 29 CFR 1910.1200.

IMPORTANT NOTE: This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or any process. Final determination of suitability of any material is the sole responsibility of the user.

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*** END OF MSDS***