

SDS Revision Date: 08/23/2018

1. Identification

1.1. Product identifier

Product Identity Corrosion Preventive Compound, Aerosol

Alternate Names Specification: MIL-PRF-81309G, Type III, Class 2, Grade 134a

LHB Part Number: 0964---000

National Stock Number: 8030-00-546-8637

CAGE Code: 0FTT5

Contract No.: SPE8EG-16-D-0011

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Technical Data Sheet.

Application Method See Product Label

1.3. Details of the supplier of the safety data sheet

Company Name LHB Industries

8833 Fleischer Place Berkeley, MO 63134

Emergency

24 hour Emergency Telephone No. (800) 633-8253 (PERS)

Customer Service: LHB Industries (314) 423-4333

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Flam. Aerosol 1;H222 Extremely flammable aerosol.

Liquified Gas;H280 Contains gas under pressure; may explode if heated.

Skin Irrit. 2;H315 Causes skin irritation.

Eye Irrit. 2;H319 Causes serious eye irritation.

Asp. Tox. 1;H304 May be fatal if swallowed and enters airways.

Simple Asphyxiant May displace oxygen and cause rapid suffocation.

LIGHTHOUSE for the BLIND

SDS Revision Date: 08/23/2018

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

May displace oxygen and cause rapid suffocation.

[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P321 Specific treatment (see information on this label).

P331 Do NOT induce vomiting.

P332+313 If skin irritation occurs: Get medical advice / attention.

P337+313 If eye irritation persists: Get medical advice / attention.

P362 Take off contaminated clothing and wash before reuse.

[Storage]:

P405 Store locked up.

P410+412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122 °F.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

SDS Revision Date: 08/23/2018

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Solvent naphtha (petroleum), heavy aliph. CAS Number: 0064742-96-7	50 - 75	Asp. Tox. 1;H304	[1]
1,1,1,2-Tetrafluoroethane (HFC-134a) CAS Number: 0000811-97-2	25 - 50	Liquified Gas;H280 Simple Asphyxiant	[1]
Barium CAS Number: 0007440-39-3	1 - 5	WaterReact. 2;H261 Skin Irrit. 2;H315 Eye Irrit. 2;H319 STOT SE 3;H335	[1]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

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.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and

seek medical attention.

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

Get medical attention if frost bitten by liquid or if irritation occurs.

Ingestion If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce

vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview Liquid and gas under pressure, overheating and overp

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 volatizing liquid or cold vapor can cause frostbite to any tissue. High vapor concentrations

^[1] Substance classified with a health or environmental hazard.

^[2] Substance with a workplace exposure limit.

^[3] PBT-substance or vPvB-substance.

^{*}The full texts of the phrases are shown in Section 16.

LIGHTHOUSE for the BLIND

SDS Revision Date: 08/23/2018

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 too 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. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

Inhalation May be fatal if swallowed and enters airways.

Eyes Causes serious eye irritation.

Skin Causes skin irritation.

5. Fire-fighting measures

5.1. Extinguishing media

Dry chemical, carbon dioxide, fog, foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Hydrogen fluoride, hydrogen chloride, carbon monoxide carbon dioxide and chlorine.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

5.3. Advice for fire-fighters

FIRE FIGHTING EQUIPMENT: Fire fighters should wear full protective equipment, and have self-contained breathing apparatus available.

SPECIAL PROCEDURES: Use water to cool containers exposed to a fire.

ERG Guide No. 126

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

SDS Revision Date:

08/23/2018

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Avoid inhalation. Use good ventilation. Read entire label before using and follow all label directions.

Dispose of in accordance with applicable Federal, State & Local regulations. Remove ignition sources and work with non-sparking tools. Use oil absorbent materials.

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.

7. Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Keep away from heat sparks, and open flame. Contents under pressure. Do not puncture, incinerate, or expose to temperatures above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Oxidizing Agents

Category NFPA 30B Level 2 Aerosol

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

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

See Product Label



SDS Revision Date: 08/23/2018

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000811-97-2 1,1,1,2-Tetrafluoroethane (HFC-	1,1,1,2-Tetrafluoroethane (HFC-134a)	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0007440-39-3 Barium	OSHA	No Established Limit	
		ACGIH	TWA: 0.5 mg/m3
	NIOSH	No Established Limit	
	Supplier	No Established Limit	
0064742-96-7 Solvent naphtha (petroleum), heavy aliph.	OSHA	No Established Limit	
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
134a)		OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007440-39-3 Barium		OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0064742-96-7 Solvent naphtha (petroleum),		OSHA	Select Carcinogen: No
heavy aliph.	heavy aliph.	NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory 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. When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust that may be generated from this product,

underlying paint, or the abrasive.

Eyes Use safety glasses with side shields or chemical goggles. If exposure causes eye

discomfort, use a full-face respirator.

SDS Revision Date:

08/23/2018



Skin Wear overalls to keep skin contact to a minimum. Chemical resistant gloves may be

needed for long term skin exposure.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the

use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits

suitable respiratory protection must be worn.

using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance Dark brown, thick consistency Liquid/Gas

Odor Solvent

Odor threshold

pH

Not Measured

Melting point / freezing point

Initial boiling point and boiling range

Not Measured

Not Measured

Flash Point > 142F (Aerosol Concentrate)

Evaporation rate (Ether = 1) Not Measured

Flammability (solid, gas) Flam. Aerosol 1; H222 Extremely flammable aerosol.

Upper/lower flammability or explosive limits Lower Explosive Limit: NA

Upper Explosive Limit: NA

Vapor pressure (Pa) 80 psia @77F

Vapor Density 3.52 (Heavier than Air)

Specific Gravity 0.919

Solubility in Water

Partition coefficient n-octanol/water (Log Kow)

Auto-ignition temperature

Not Measured

Not Measured

Not Measured

Viscosity (cSt)

Not Measured

VOC Content (minus water and exempt solvents) 57.0% by wt, 661 g/L, 5.52 lbs/gal

Density 7.66 lb/gal

HAPS (lbs/gal) 0.0
HAPS (lbs/gal of Solids) 0.0
HAPS (lbs/lb of Solids) 0.0

9.2. Other information

No other relevant information.

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

SDS Revision Date:

08/23/2018

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Do not expose to heat or store at temperature above 120°F.

10.5. Incompatible materials

Oxidizing Agents

10.6. Hazardous decomposition products

Hydrogen fluoride, hydrogen chloride, carbon monoxide carbon dioxide and chlorine.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Solvent naphtha (petroleum), heavy aliph (64742-96-7)	2,500.00, Rat - Category: 5	No data available	No data available	No data available	No data available
1,1,1,2-Tetrafluoroethane (HFC-134a) - (811-97-2)	No data available	No data available	No data available	No data available	No data available
Barium - (7440-39-3)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

LIGHTHOUSE for the BLIND

SDS Revision Date:

08/23/2018

Classification	Category	Hazard Description
Acute toxicity (oral)		Not Applicable
Acute toxicity (dermal)		Not Applicable
Acute toxicity (inhalation)		Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization		Not Applicable
Skin sensitization		Not Applicable
Germ cell mutagenicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive toxicity		Not Applicable
STOT-single exposure		Not Applicable
STOT-repeated exposure		Not Applicable
Aspiration hazard	1	May be fatal if swallowed and enters airways.

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Solvent naphtha (petroleum), heavy aliph (64742-96-7)	Not Available	Not Available	Not Available
1,1,1,2-Tetrafluoroethane (HFC-134a) - (811-97-2)	Not Available	Not Available	Not Available
Barium - (7440-39-3)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

SDS Revision Date: 08/23/2018

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

DOT (Domestic Surface IMO / IMDG (Ocean ICAO/IATA

Transportation) Transportation)

14.1. UN number UN1950 UN1950 UN1950

14.2. UN proper shipping UN1950, Aerosols, Limited Aerosols, Limited Quantity Aerosols, Limited

Quantity, 2.1, Quantity

14.3. Transport hazard DOT Hazard Class: 2.1 IMDG: 2.1 Air Class: 2.1

class(es) Sub Class: Not Applicable

14.4. Packing group Not Applicable Not Applicable Not Applicable

14.5. Environmental hazards

name

IMDG Marine Pollutant: No:

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected

regulations are represented.

Toxic Substance All components of this material are either listed or exempt from listing on the TSCA

Control Act (TSCA) Inventory.

WHMIS Classification A B5 D2B

US EPA Tier II Hazards Fire: No

Sudden Release of Pressure: Yes

Reactive: No

Immediate (Acute): Yes Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

SDS Revision Date:

08/23/2018



EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Barium

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Barium

Pennsylvania RTK Substances (>1%):

Barium

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H261 In contact with water releases flammable gases.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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.

End of Document