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1. Identification

| 1.1. Product identifier |
|-------------------------|
| Product Identity |
| Alternate Names |

Corrosion Preventive Compound, Aerosol

Specification: MIL-PRF-81309G, Type II, Class 2, Grade134a LHB Part Number: 0954---000 National Stock Number: 8030-0-938-1947 CAGE Code: 0FTT5 Contract No.: SPE8EG16D0011

| 1.2. Relevant identified uses of the substance or mixture and uses advised against | | | | |
|--|--|--|--|--|
| Intended use | See Technical Data Sheet. | | | |
| Application Method | thod 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. Customer Service: LHB Industries

(800) 633-8253 (PERS) (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. |
| Acute Tox. 5;H303 | May be harmful if swallowed. (Not adopted by US OSHA) |
| Asp. Tox. 1;H304 | May be fatal if swallowed and enters airways. |
| Simple Asphyxiant | May displace oxygen and cause rapid suffocation. |



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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.

H303 May be harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

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.

[Response]:

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

P312 Call a POISON CENTER or doctor / physician if you feel unwell.

P331 Do NOT induce vomiting.

[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.

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 |
|---|----------|---|-------|
| Petroleum distillates, hydrotreated light CAS Number: 0064742-47-8 | 25 - 50 | Asp. Tox. 1;H304 | [1] |
| 1,1,1,2-Tetrafluoroethane (HFC-134a) CAS Number: 0000811-97-2 | 10 - 25 | Liquified Gas;H280 Simple Asphyxiant | [1] |



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| Barium Oxidate CAS Number: Proprietary | | Acute Tox. 4;H302 Acute Tox. 4;H332 | [1] |
|---|--------|--|-----|
| Barium Sulfonate CAS Number: Proprietary | 5 - 10 | Not Classified | [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.

[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.

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 importa | nt symptoms and effects, both acute and delayed |
| • • • | |

Liquid and gas under pressure, overheating and overpressurizing may cause gas release or Overview 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 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

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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.

InhalationMay be fatal if swallowed and enters airways.IngestionMay be harmful if swallowed.

5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO_2 , powder, water spray. Do not use: water jet.

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

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.



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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.

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

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-134a) | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0064742-47-8 | Petroleum distillates, hydrotreated light | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | Recommended 300 ppm PEL |
| Proprietary | Barium Sulfonate | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |



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| Proprietary | Barium Oxidate | OSHA | No Established Limit |
|-------------|----------------|----------|----------------------|
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |

Contains mineral oil. The exposure limits for oil mist are 5 mg/m3 OSHA PEL and 10 mg/m3 ACGIH.

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--|------------------|--------|--|
| 13(12) | | 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; |
| 0064742-47-8 Petroleum distillates, hydrotreated | | | Select Carcinogen: No |
| light | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| Proprietary | Barium Sulfonate | 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; |
| Proprietary Barium Oxidate OSH | | | Select Carcinogen: No |
| | | 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. |
| 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. |
| Other Work Practices | Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse. |
| See section 2 for further | details [Prevention]: |

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9. Physical and chemical properties

| Appearance | DARK BROWN Liquid/Gas |
|---|-------------------------------------|
| Odor | Solvent |
| Odor threshold | Not determined |
| рН | Not Measured |
| Melting point / freezing point | Not Measured |
| Initial boiling point and boiling range | Not Measured |
| Flash Point | > 142F (Aerosol Concentrate) |
| Evaporation rate (Ether = 1) | Not Measured |
| Flammability (solid, gas) | Gas |
| 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 | 0.950 |
| Solubility in Water | Not Measured |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Not Measured |
| Decomposition temperature | Not Measured |
| Viscosity (cSt) | Not Measured |
| VOC Content | 37.5% by wt, 441 g/L (3.68 lbs/gal) |
| Density | 7.92 lb/gal |
| HAPS (Ibs/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. | |

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.



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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 |
|--|-----------------------------------|----------------------|---------------------------------------|---|--------------------------------|
| Petroleum distillates, hydrotreated light - (64742-47-8) | > 5,000.00, Rat - Category: NA | 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 Oxidate - (Proprietary) | No data available | No data available | No data available | No data available | No data available |
| Barium Sulfonate - (Proprietary) | 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).

| Classification | Category | Hazard Description |
|-----------------------------|----------|---|
| Acute toxicity (oral) | 5 | May be harmful if swallowed. (Not adopted by US OSHA) |
| Acute toxicity (dermal) | | Not Applicable |
| Acute toxicity (inhalation) | | Not Applicable |
| Skin corrosion/irritation | | Not Applicable |



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| Serious eye damage/irritation | | Not Applicable |
|-------------------------------|---|---|
| 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 |
|--|----------------------------|--|----------------------|
| Petroleum distillates, hydrotreated light - (64742-47-8) | 45.00, Pimephales promelas | 4,720.00, Dendronereides heteropoda | Not Available |
| 1,1,1,2-Tetrafluoroethane (HFC-134a) - (811-97-2) | Not Available | Not Available | Not Available |
| Barium Oxidate - (Proprietary) | Not Available | Not Available | Not Available |
| Barium Sulfonate - (Proprietary) | 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.

12.6. Other adverse effects

No data available.



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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 Transportation) | IMO / IMDG (Ocean Transportation) | ICAO/IATA | |
|-------------------------------------|--|--|-------------------------------|--|
| 14.1. UN number | UN1950 | UN1950 | UN1950 | |
| 14.2. UN proper shipping name | UN1950, Aerosols, Limited Quantity, 2.1, | Aerosols, Limited Quantity | Aerosols, Limited Quantity | |
| 14.3. Transport hazard class(es) | DOT Hazard Class: 2.1 | IMDG: 2.1 Sub Class: Not Applicable | Air Class: 2.1 | |
| 14.4. Packing group | Not Applicable | Not Applicable | Not Applicable | |
| 14.5. Environmental hazards | | | | |
| IMDG Ma | arine 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 Control Act (TSCA) | All components of this material are either listed or exempt from listing on the TSCA Inventory. | |
| WHMIS Classification | A B5 | |
| US EPA Tier II Hazards | Fire: No | |

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.

EPCRA 302 Extremely Hazardous:

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



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EPCRA 313 Toxic Chemicals:

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

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%) :

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

Pennsylvania RTK Substances (>1%) :

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

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:

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H332 Harmful if inhaled.

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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