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SAFETY DATA SHEET

Section 1. Identification

Product Name: <u>Bis(ethylmethylamino)silane</u>

Product Type: Liquid

CAS Number: 1011514-41-2

Product Number: SI4412

Recommended Use: Laboratory chemicals, synthesis of substances.

Uses Advised Against: This product is being supplied under the TSCA R&D Exemption (40

CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless

appropriate consent is granted in writing by Ereztech LLC.

Product Manufacturer: Ereztech LLC

11555 Medlock Bridge Road, Suite 100

Johns Creek, GA 30097

Product Information: (888) 658-1221

In Case of an Emergency: CHEMTREC: 1-800-424-9300 (USA);

+1 703-527-3887 (International); CCN836180
*** Contact manufacturer for all non-emergency calls.

Section 2. Hazards Identification

Appearance/Odor: Colorless liquid, acrid amine-like odor.

Classification: FLAMMABLE LIQUIDS – Category 2, H225

SUBSTANCE AND MIXTURES, WHICH IN CONTACT WITH WATER,

EMIT FLAMMABLE GASES – Category 2, H261 ACUTE TOXICITY, ORAL – Category 4, H302

SKIN CORROSION/IRRITATION - Category 1B, H314

SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1, H318 SPECIFIC ORGAN TOXICITY, SINGLE EXPOSURE; RESPIRATORY

TRACT IRRITATION - Category 3, H335

GHS Label Elements
Hazard Pictograms:



Section 2. Hazards Identification

Signal Word: DANGER

Hazard Statements: H226: Highly flammable liquid and vapor.

H261: In contact with water releases flammable gases.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.H335: May cause respiratory irritation.

<u>Precautionary Statements</u> Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P223: Do not allow contact with water.

P231 + P232: Handle and store contents under inert gas. Protect from moisture.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/handling equipment.

P242: Use non-sparking tools.

P243: Take action to prevent static discharges.

P260: Do not breathe sprays, mists, vapors or gases.

P264 + P265: Wash hands and exposed skin thoroughly after handling. Do not touch eyes.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or with adequate ventilation.

P280: Wear protective gloves/protective clothing/eye protection/ face protection/hearing protection.

P301 + P317: IF SWALLOWED: Get medical help.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302 + P335 + P334: IF ON SKIN: Brush off loose particles from skin and immerse in cool water.

P302 + P361 + P354: IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P354 + P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P316: Get emergency medical help immediately.

P319: Get medical help if you feel unwell.

P330: Rinse mouth.

P363: Wash contaminated clothing before reuse.

Response:

Section 2. Hazards Identification

Response (cont.): P370 + P378: In case of fire: Use dry chemical or carbon dioxide

to extinguish. DO NOT USE WATER.

P402 + P404: Store in a dry place. Store in a closed container. Storage:

P403 + P233 + P235: Store in a well ventilated place. Keep

container tightly closed. Keep cool.

P405: Store locked up.

P501: Dispose of contents/container in accordance with federal, Disposal:

state and local regulations.

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified (HNOC):

None identified.

Section 3. Composition/Information on Ingredients

Substance Type: Mono-constituent.

BEMAS; (EtMeN)2SiH2. Synonyms:

Formula: $C_6H_{18}N_2Si$ Molecular Weight: 146.31 g/mol. EC-No.: 686-013-8

Component Name	%	CAS Number
Bis(ethylmethylamino)silane	≥ 99	1011514-41-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of Necessary First Aid Measures

General Advice: Move out of dangerous area. Get emergency medical help immediately. Show

> this safety data sheet to the doctor in attendance. If unconscious, place in recovery position and get medical help immediately. Maintain an open airway.

Loosen tight clothing such as a collar, tie, belt or waistband.

Immediately flush eyes with plenty of water, occasionally lifting the upper and **Eye Contact:**

> lower eyelids. Rinse for a minimum of 15 minutes. Check for and remove any contact lenses after initial rinse period and continue rinsing for an additional 15 minutes. Keep eyes wide open during rinsing process. Get emergency medical

help immediately.

Section 4. First Aid Measures

Skin Contact: Remove all contaminated clothing and shoes. Wash off contaminated skin with

plenty of water for a minimum of 15 minutes. Thoroughly clean and dry

contaminated clothing before reuse. Destroy/discard contaminated shoes. In the event of complaints or symptoms, avoid further exposure. Get emergency

medical help immediately.

Inhalation: Get emergency medical help immediately. Rescuer should wear a mask or self-

contained breathing apparatus if it is suspected that fumes or gases are still present. Remove person to fresh air and keep comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Do not use the mouth-to-mouth method of resuscitation if victim ingested or inhaled the product; give artificial respiration with the aid of a pocket mask equipped with a one-way valve

or other proper respiratory medical devices.

Ingestion: Get emergency medical help immediately. Rinse mouth, and then give water to

drink (two glasses at most). Do NOT induce vomiting. Remove dentures if any. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If person is not

breathing, if breathing is irregular or if respiratory arrest occurs, see the

"Inhalation" first aid measures noted above.

Most Important Symptoms/Effects, Acute and Delayed Potential Acute Health Effects

Eye Contact: Product causes serious eye damage. Symptoms may include watering, redness,

pain, swelling of the eyelids, inability to keep eye open, blurred vison and

temporary/permanent loss of vision.

Inhalation: Product is extremely corrosive to mucous membranes and tissues of the upper

respiratory tract. Symptoms may include a burning sensation, coughing, coughing up blood (hemoptysis), wheezing, laryngitis, shortness of breath/difficulty in breathing (dyspnea), blueness (cyanosis) of lips and skin, nausea,

headaches, disorientation, general weakness and loss of consciousness.

Skin Contact: Skin contact with this product may be expected to cause (severe) chemical

burns. Symptoms may include reddening of skin, a burning or itching sensation,

pain, blistering and tissue necrosis.

Ingestion: Ingestion may be expected to result in burns of the mouth and throat and

potential perforation of the esophagus and stomach. Symptoms may include pain when swallowing (odynophagia), difficulty swallowing (dysphagia), fever, nausea, recurrent vomiting (emesis) and vomiting of blood (hematemesis). Severe burns which may be accompanied by perforation of the esophagus and stomach may present additional symptoms of abdominal pain/rigidity, chest

and/or back pain.

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Notes to Physician: Treat symptomatically.

Section 4. First Aid Measures

No specific treatment. **Specific Treatments:**

Protection of First Responders: No action taken shall be taken involving any personal risk

without suitable training. It may be dangerous to the person

providing aid to give mouth-to-mouth resuscitation.

See Toxicological Information (Section 11)

Unusual Fire and

Explosion Hazards:

Product of Combustion:

Protection of Firefighters:

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: THE MOST EFFECTIVE FIRE EXTINGUISHING AGENT IS DRY

CHEMICAL POWDER PRESSURIZED WITH NITROGEN.

Carbon dioxide (CO₂) may also be used.

Unsuitable Extinguishing Media: DO NOT USE FOAM OR WATER as extinguishing agents as

product reacts with these agents to release flammable gases.

Product reacts with water and protic solvents to release highly flammable gases. Gases released may form explosive mixtures with air. Product runoff to sewer may create a fire or explosion hazard. Gases released when product is exposed to moisture in air, water or protic solvents are heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to an

ignition source and flashback.

Products of combustion include carbon oxides (CO_x), nitrogen oxides (NO_x) and silicon dioxide. Irritating fumes and organic acid vapors may be generated during exposure to elevated

temperatures or open flame.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be

taken involving any personal risk or without suitable training. Prevent contact with skin or eyes. Prevent the formation and

inhalation of sprays, mists, aerosols, vapors and gases.

Eliminate all local and distant ignition sources. Move containers from fire area if process can be accomplished without risk to firefighters. To reduce the possibility of explosion, use a water spray or fog to reduce direct vapors and to cool unopened containers. Do not cut, grind, drill or

product because an explosion may result.

Fire-fighters should wear appropriate protection equipment and self-contained breathing apparatus (SCBA) with a full

weld on or near product containers (even empty) of this

face-piece operated in a positive pressure mode.

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Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel: No action shall be taken involving any personal risk or without

suitable training. Evacuate surrounding areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in

immediate area). Keep unnecessary and unprotected personnel

from entering. Do not touch or walk through spilled material.

Prevent the formation and inhalation of sprays, mists, vapors and

gases. Provide adequate ventilation. Wear respiratory protection.

Put on appropriate personal protective equipment.

For Emergency Responders: If specialized clothing is required to deal with the spillage, take

note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For Non-Emergency

Personnel".

Environmental Precautions: Do not allow dispersal of spilled material and contact with soil,

waterways, drains and sewers. Inform the relevant authorities if

Eliminate all local and distant ignition sources. Take action to prevent static discharges. Move containers from spill area if safe

the product has caused environmental pollution (sewers,

waterways, soil or air).

Methods for Containment

General:

to do so. Prevent the formation and inhalation of sprays, mists, vapors and gases. Do not allow the spilled material to get wet or the use water to clean up spillages or residues. Use spark-proof tools and explosion-proof equipment. In the event of combustion: cover spillage with a dry, extinguishing material (e.g. dry sand, dry chemical, graphite powder) and allow time for decomposition or for fire to burn out (see Section 5 Firefighting Measures). Collect and place inert spillage in a dry, sealed container for disposal. Dispose of collected spillage in accordance with federal, state and local regulations. Contaminated absorbent material may pose the

same hazard as the spilled product.

Small Spill: Collect spillage with a dry, non-combustible, absorbent material

(e.g. dry sand, vermiculite or diatomaceous earth) and place in

dry, sealed container for disposal.

Large Spill: Approach release from upwind. Prevent entry into sewers, water

courses, basements or confined areas. Contain and collect spillage with a dry, non-combustible, absorbent material (e.g. dry sand, vermiculite or diatomaceous earth) and place in dry, sealed

container for disposal.

Note: see Section 1 for emergency contact information and

Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions:

Product is air sensitive and reacts with moisture/water/protic solvents to release highly flammable gases; handle under a dry, inert gas. Nitrogen with less than 5 ppm each of moisture and oxygen is recommended. Keep away from all sources of ignition – NO SMOKING. Protect against electrostatic discharges. Use explosion-proof electrical/ventilating/lighting/handling equipment. Use non-sparking tools and equipment. Keep container tightly sealed. Prevent contact with skin, eyes and clothing. Prevent the formation and inhalation of sprays, mists, vapors and gases. Do not ingest. Avoid prolonged exposure. Ensure adequate ventilation.

Protective Measures:

Put on appropriate personal protective equipment (see Section 8). Keep in the original container kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

General Occupational Hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Safe Storage Conditions:

Product is air sensitive and reacts with moisture/water/protic solvents to release highly flammable gases; store under an inert gas. Nitrogen with less than 5 ppm each of moisture and oxygen and a temperature range of 2 – 8 °C is recommended. Keep away from all sources of ignition – NO SMOKING. Store in original container protected from direct sunlight in a dry and well-ventilated area, away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use. Store locked up.

Section 8. Exposure Controls/Personal Protection

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and conduct regular repairs. Waste from these procedures should be handled in accordance with Section 13.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits: Product, as supplied, does not contain any hazardous materials

with occupational exposure limits established by the region

specific regulatory bodies.

Engineering Controls: Properly operating chemical fume hood designed for hazardous

chemicals and having an average face velocity of at least 100

feet per minute. Provide an eyewash/shower station.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should

be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable

levels.

Individual Protection Measures

Hygiene Measures: Wash hands, forearms and face thoroughly after handling

chemical products, before eating, smoking and using the lavatory and at the end of the working period. Remove all soiled and contaminated clothing immediately. Do not inhale fumes, aerosols or vapors. Prevent contact with eyes and skin. Ensure that eyewash stations and safety showers are close to

the workstation location.

Eye/Face Protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or aerosols. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles, faceshield (8-inch minimum). Refer to 29 CFR

1910.133, ANSI Z87.1, or European Standard EN166.

Skin Protection

Hand Protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Chemical-resistant gloves.

Section 8. Exposure Controls/Personal Protection

Hand Protection (cont.): Gloves must be inspected prior to use. Use proper glove

removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. For full contact,

wear Neoprene or nitrile rubber gloves.

Other Skin Protection: Appropriate footwear and any additional skin protection

measures should be selected based on the task being

performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity discharges, wear anti-static, flame retardant protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls,

boots and gloves.

Respiratory Protection: Where risk assessment shows air-purifying respirators are

appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator

is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as

NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

Physical State: Liquid.
Color: Colorless.

Acrid, amine-like. Odor: **Odor Threshold:** No data available. No data available. pH: No data available. **Freezing Point:** 134 °C (273.2 °F). **Boiling Point:** Flash Point: No data available. No data available. **Auto-ignition Temperature: Specific Gravity:** 0.8 g/ml @ 25 °C. **Vapor Pressure:** No data available.

Water Solubility: Reacts to release flammable gases.

Viscosity: No data available.

Vapor Density:

No data available.

Section 10. Stability and Reactivity

Reactivity: This product reacts with moisture in air, water and protic

solvents to release highly flammable gases.

Chemical Stability: This product is stable when stored under a dry, inert

atmosphere and away from heat. Nitrogen containing less than 5 ppm each moisture and air and a temperature range

of 2 – 8 °C is recommended.

Conditions to Avoid: Keep away from air, moisture, water, protic solvents, heat,

sources of ignition and incompatible materials.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous

decomposition products should not be produced. Hazardous

decomposition products formed under fire conditions: ethylmethylamine, carbon oxides (CO_X) , nitrogen oxides (NO_X) and silicone oxides. Irritating and potentially toxic fumes may be generated during exposure to elevated temperatures or open flame. In the event of a fire: see

Section 5.

Possibility of Hazardous Reactions: Under normal conditions of storage and use noted above,

hazardous reactions will not occur. Hazardous reactions or instability may occur under certain conditions of storage or use. In contact with water, product reacts to release a highly

flammable gas.

Section 11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity: No specific data available.

Irritation/Corrosion: No specific data available. Product causes thermal and/or

chemical burns to the skin, eyes and exposed mucous

membranes.

Sensitization: No specific data available.

Germ Cell Mutagenicity: No specific data available.

Carcinogenicity

ACGIH No component of this product present at levels greater than

0.1% is identified as probable, possible or confirmed human

carcinogen by ACGIH.

No component of this product present at levels greater than

0.1% is identified as probable, possible or confirmed human

carcinogen by IARC.

Section 11. Toxicological Information

Carcinogenicity (cont.)

NTP No component of this product present at levels greater

than 0.1% is identified as probable, possible or confirmed

human carcinogen by NTP.

OSHA No component of this product present at levels greater

than 0.1% is identified as probable, possible or confirmed

human carcinogen by OSHA.

No specific data available.

Reproductive Toxicity:No specific data available. **Teratogenicity:**No specific data available.

Specific Target Organ Toxicity: Respiratory tract irritation/damage through thermal and

chemical burns.

Specific Target Organ Toxicity:

(Repeated Exposure)

Routes of Exposure

(Single Exposure)

Aspiration Hazard: No specific data available.

Information on the Likely: Common routes of exposure: inhalation, dermal (failure

to use skin protection), eye (failure to use safety eyewear). Less common: ingestion (failure to employ recommended hygiene measures (e.g. smoking or eating after handling product without washing hands or using

hand protection).

Additional Information: To the best of our knowledge, the chemical, physical and

toxicological properties of this product have not been

thoroughly investigated.

Section 12. Ecological Information

Ecotoxicity: The effects of this product on the environment have not

been tested.

Numerical Measures of Toxicity: No specific data available.

Persistence and Degradability

Biodegradability: No specific data available.

Bioaccumulative Potential: No specific data available.

Mobility in Soil: No specific data available.

Results of PBT and vPvB Assessment: PBT/vPvB assessment not available as chemical safety

assessment not required/not conducted.

Endocrine Disrupting Properties: No specific data available.

Other Adverse Effects: An environmental hazard cannot be excluded in the event

of unprofessional handling or disposal.

Section 13. Disposal Considerations

Waste Treatment Methods

Dispose of in accordance with local, state, and federal regulations. **Product:**

> Refer to 40 CFR 260-299 for complete waste disposal regulations. Consult your local, state, or federal agency before disposing of any

chemicals.

Contaminated Packaging: Empty containers retain product residue (liquids, vapors, gases) and

can be dangerous. Dispose of as unused product. DO NOT EXPOSE SUCH CONTAINERS TO AIR, MOISTURE, HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY

MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section 14. Transport Information

	DOT	IMDG	IATA	
UN Number	UN2924	UN2924	UN2924	
UN Proper Shipping Name	Flammable liquid, corrosive, n.o.s. (bis(ethylmethylamino) silane)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (bis(ethylmethylamino) silane)	Flammable liquid, corrosive, n.o.s. (bis(ethylmethylamino) silane)	
Transport Hazard Classes	3 (8)	3 (8)	3 (8)	
Packing Group			II	
Environmental Hazards	IDGING C	HEMICAL	GAP'S	
Additional Information	-	EMS-No: F-G, S-C	-	

Special Precautions for User:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory Information

TSCA (Toxic Substance Control Act):

This product is not listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory). Use of this product is restricted to research and development only. This product must be used under the supervision of a technically qualified individual as defined by the TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.

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Section 15. Regulatory Information

SARA 302 Components

This product does not contain any components which are subject to the reporting requirements of SARA Title III, Section 302 EHS TPQ.

SARA 304 Components

This product does not contain any components which are subject to the reporting requirements of SARA Title III, Section 304 RQ.

SARA 311/312 Hazards

Fire Hazard (Flammable liquid), Reactivity Hazard (In contact with water emits flammable gas), Acute Health Hazard (Acute toxicity: oral, dermal, inhalation; Skin corrosion or irritation; Serious eye damage or eye irritation; Specific Target Organ Toxicity (STOT), single exposure: respiratory irritation).

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

Not applicable.

Clean Water Act

Not applicable.

CERCLA Reportable Quantity

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US Department of Homeland Security (DHS)

This product does not contain any DHS chemicals.

US Department of Transportation (DOT)

Component	Reportable Quantity	DOT Marine Pollutant	DOT Severe Marine Pollutant
Bis(ethylmethylamino) silane	No	No	No

US State Right-to-Know Listings

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Bis(ethylmethylamino)	-	-	-	-	-
silane					

[&]quot;X" - Listed.

Section 15. Regulatory Information

US State Chemicals of High Concern Listings

Component	Maine	Vermont	Washington
Bis(ethylmethylamino)silane	-	-	-

[&]quot;X" - Listed.

California Proposition 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

National Fire Protection Association (U.S.A.)



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Copyright © 2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

HMIS Rating

HEALTH	3
FLAMMABILITY	3
PHYSICAL HAZARD	2

History

Date of Issue/Date of Revision: 4/29/2025.

Date of Previous Issue: None.

None available. References:

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Section 16. Other Information

Abbreviations and Acronyms

ACGIH : American Conference of Governmental Industrial Hygienists.

AIHA : American Industrial Hygiene Association.

ATE : Acute Toxicity Estimate (per Chapter 3.1 of GHS 10 standard).

BEI : Biological Exposure Indices (ACGIH).

CAS : Chemical Abstracts Service (division of the American Chemical Society).

CHRIS : Chemical Hazards Response Information System (US DOT).

CLP : Classification, Labeling and Packaging (European Union (EU)).

DOT : US Department of Transportation.

EC-No. : The EC Inventory (EINECS, ELINCS and the NLP-list is the source of the seven digit

EC number, an identifier of substances commercially available with the EU (European

Union).

EINECS : European Inventory of Existing Commercial Chemical Substances.

EHS : Extremely Hazardous Substance.

ELINCS : European List of Notified Chemical Substances.

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

HAP : Hazardous Air Pollutants (Clean Air Act).HMIS : Hazardous Materials Identification System.

HNOC : Hazards Not Otherwise Classified.

IARC : International Agency for Research on Cancer.

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulations by the "International Air Transport Association"

(IATA).

IDLH : Immediately Dangerous to Life or Health (US National Institute for Occupation Health

and Safety (NIOSH)).

IMDG : International Maritime Code for Dangerous Goods.

IP : Intraperitoneal.
IV : Intravenous.

NFPA : National Fire Protection Association.

NIOSH : National Institute of Occupational Safety and Health.

NSRL : No Significant Risk Levels. NTP : National Toxicology Program.

ODS : Ozone Depleting Substances (US Clean Air Act).

OECD : Organization for Economic Co-Operation and Development.

OEL : Occupational Exposure Limit.

OSHA : Occupational Safety and Health Administration.

PBT : Persistent Bioaccumulative and Toxic.

PEL : Permissible Exposure Limits.
REL : Recommended Exposure Limits.

RQ : Reportable Quantity.

SARA : Superfund Amendments and Reauthorization Act.

STEL (ST) : Short Term Exposure Limit (ACGIH/NIOSH)

STOT : Specific Target Organ Toxicity.

Section 16. Other Information

Abbreviations and Acronyms (cont.)

TLV : Threshold Limit Values (ACGIH).TPQ : Threshold Planning Quantity.TWA : Time Weighted Average.VOC : Volatile Organic Compound.

vPvB : Very Persistent and Very Bioaccumulative.

WEEL: Workplace Environmental Exposure Level (AIHA).

Disclaimer

The information herein is believed to be accurate and is presented in good faith; however, no warranties or representations are made by Ereztech LLC regarding the accuracy or completeness of the information. Ereztech LLC shall not be liable for any damages resulting from the handling, or from the contact with the above product.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

