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SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY INFORMAT

PRODUCT NAME: Bis(ethylmethylamino)silane

FORMULA: H₂Si[(N(CH₃) C₂H₅)]₂

CAS NO: 1011514-41-2

SYNONYMS: Bis(ethymethylamido)silane, BEMAS

Intended Use: For R&D use only.

MANUFACTURER:

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SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION: Flammable liquids (Category 2) Acute toxicity (Category 4) Skin corrosion/irritation (Category 2) Serious eye damage/irritation (Category 2A) Respiratory tract irritation (Category 3)



Signal Word

DANGER

Bis(ethylmethylamino)silane

SECTION 2 HAZARDS IDENTIFICATION (Cont.)

Hazard Statements

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfacesNo smoking	
P231 + P232	Handle under inert gas. Protect from moisture.	
P233	Keep container tightly closed	
P235	Keep cool.	
P240	Ground and bond container and receiving equipment	
P241	Use explosion-proof electrical/ventilating/lighting equipment	
P242	Use non-sparking tools	
P243	Take action to prevent static discharges	
P260	Do not breathe dust/fume/gas/mist/vapors/spray	
P264	Wash hands thoroughly after handling	
P273	Avoid release into the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection	
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower	
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P313	Get medical advice/attention	
P403	Store in a well-ventilated place	

NFPA Rating:

Health: 3

lammability: 3
lammability: 3

Reactivity: 1

Reactivity: 1

HMIS Rating: Health: 3

SECTION 3

COMPOSITION / INFORMATION ON INGREDIENTS

Formula: $H_2Si[(N(CH_3) C_2H_5)]_2$

Molecular Weight: 146.30 g/mol

Synonyms: Bis(ethymethylamido)silane, BEMAS CHEMICAL NAME CAS#

Bis(ethylmethylamino)silane

1011514-41-2

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: Immediately flush eyes with water for at least 15 minutes. Get immediate medical attention.

SKIN EXPOSURE: Flush with water and then wash with soap and water. Consult a physician.

INHALATION: Move to fresh air. Get immediate medial attention.

INGESTION: Do NOT induce vomiting. Never give fluids to an unconscious person. Get immediate medical attention.

SECTION 5 FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:

Suitable:Foam, carbon dioxide, dry chemical.Unsuitable:DO NOT USE WATER!

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Organic acid vapors, ethyl(methyl)amine

ADVICE FOR FIRE FIGHTERS: Avoid eye and skin contact. Do not breathe fumes or inhale vapors. Wear self-contained breathing apparatus. Use water spray to cool unopened containers. Keep away from heat/sparks/open flame/hot surface. No smoking.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear protective equipment. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS: Reaction with water in the environment will rapidly decompose to ethyl(methyl)amine. **METHODS AND MATERIALS:** Cover spill with absorbent material. Transfer to a suitable container for disposal. Absorb onto vermiculite and dispose of absorbent material as solid waste.

SECTION 7 HANDLING AND STORAGE

PERSONAL PRECAUTIONS

Keep away from all ignition sources. Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture. Handle under inert gas.

CONDITIONS FOR SAFE STORAGE

Store in a standard flammable liquids cabinet or room. Keep away from moisture in a cool, well-ventilated area. Store under inert gas. Hydrolyzes readily. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

INCOMPATIBILITIES

Reacts with water and moisture in air liberating ethyl(methyl)amine. Avoid contact with alcohols, acids, and oxidizers.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

Contains no substances with occupational exposure limit values.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Wear chemical safety glasses, faceshield. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH or EN.

SKIN PROTECTION: Compatible chemical-resistant gloves. Inspect gloves before each use. Use proper glove removal technique 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.

BODY PROTECTION: Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Clear liquid FORMULA MASS: 146.30 g/mol ODOR: No data available ODOR THRESHOLD: No data available pH: No data available MELTING POINT/FREEZING POINT: No data available BOILING POINT: 134° C FLASH POINT: No data available EVAPORATION RATE: No data available UPPER/LOWER FLAMMABILITY/EXPLOSION LIMITS: No data available VAPOR PRESSURE: 5 torr @ 20° C VAPOR DENSITY: No data available

Bis(ethylmethylamino)silane

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES (Cont.)

SPECIFIC GRAVITY: 0.80 g/ml SOLUBILITY IN WATER: Reacts PARTITION COEFFICIENT: N-OCTANOL/WATER: no data available AUTO-IGNITION TEMPERATURE: no data available DECOMPOSITION: No data available VISCOSITY: No data available

SECTION 10 STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable in sealed containers stored under a dry inert atmosphere.

POSSIBILITY OF HAZARDOUS REACTION: Will not polymerize.

CONDITIONS TO AVOID: Avoid contact with heat, sparks, or open flame. Avoid contact with alcohols, acids, oxidizers, and moisture. Avoid extremes of temperature and direct sunlight.

INCOMPATIBILITY: Reacts with water and moisture in air liberating ethyl(methyl)amine. Avoid contact with alcohols, acids, and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Organic acid vapors, ethyl(methyl)amine.

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: No data available. SKIN CORROSIVE/IRRITANT: May cause irritation or dermatitis. SEROUS EYE DAMAGE/IRRITATION: May cause severe eye irritation. RESPIRATORY OR SKIN SENSITIZATION: No data available GERM CELL MUTAGENICITY: No data available CARCINOGENICITY: No component of this product present at levels greater or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by IARC, ACGIH, NTP, OSHA. REPRODUCTIVE TOXICITY: No data available STOT-Single Exposure: No data available STOT-Repeated Exposure: No data available ASPIRATION HAZARD: No data available ADDITIONAL TOXICOLOGICAL INFORMATION The hydrolysis products include ethyl(methyl)amine, which is toxic and flammable.

SECTION 12 ECOLOGICAL DATA

GENERAL INFORMATION: Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also, poisonous for fish and plankton in water bodies. Do not allow material to be released to the environment without proper governmental permits. Very toxic for aquatic organisms. **TOXICITY:** No data available

PERSISTENCE AND DEGRADABILITY: No data available BIOACCUMULATIVE POTENTIAL: No data available MOBILITY IN SOIL: No data available OTHER ADVERSE EFFECTS: No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of all product and materials according to the state, local, or national regulations.

SECTION 14 TRANSPORTATION DATA

Flammable liquid, corrosive, n.o.s. (Bis (Ethylmethylamino) Silane) Class 3 (8) UN2924 PG III IATA, IMDG, and DOT Regulated

SECTION 15 REGULATORY INFORMATION

OSHA HAZARDS SARA 302 COMPONENTS SARA 313 COMPONENTS

Flammable liquid, Corrosive

SARA302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

No components are subject to the Massachusetts Right to Know Act.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

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	1011514-41-2
NEW JERSEY RIGHT TO KNOW COMPONENTS	
Bis(ethylmethylamino)silane	CAS-No.
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CALIFORNIA PROP 65 COMPONENTS

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

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Wonik Materials North America, LLC. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information. DATE PREPARED: 02/2019 Rev. 2

REPLACES: 03/2015 Rev. 1 SDS DEPT