

# GELEST, INC.

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **POTASSIUM BIS(TRIMETHYLSILYL)AMIDE, 11% - SIP6890.0**

CHEMICAL NAME: POTASSIUM BIS(TRIMETHYLSILYL)AMIDE, 11% in toluene

SYNONYMS: POTASSIUM HEXAMETHYLDISILAZANE

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C<sub>6</sub>H<sub>18</sub>NNaSi<sub>2</sub>

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 1

## INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
POTASSIUM BIS(TRIMETHYLSILYL)AMIDE	40949-94-8	>10		not established
TOLUENE	108-88-3	>85	50ppm	200ppm
HEXAMETHYLDISILAZANE	999-97-3	<2		not established

## PHYSICAL DATA

Boiling Point- (initial, toluene): 111°C

Specific Gravity: 0.877

Vapor Density (toluene): 3.2

% volatiles: >90

Molecular Weight: 199.49

Appearance & Color: Clear to slightly yellow solution with aromatic odor.

Melting Point: <0°C

Vapor Pressure (toluene): 54mm

Solubility in water: insoluble, reacts rapidly

Evaporation rate: N/A

Other: N/A

## FIRE & EXPLOSION DATA

Flash Point, COC- toluene: 4°C (40°F) Autoignition Temp.: (toluene) 536°C

Flammability Limits (toluene)- LEL: 1.0 UEL: 7.1

Potassium bis(trimethylsilyl)amide, when removed from toluene solvent is a flammable solid. It has been reported to ignite spontaneously if heated to > 170°C in air.

Extinguishing Media: Foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: Avoid water spray. Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and caustic vapors may develop when material is exposed to elevated temperatures or open flame.

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## ENVIRONMENTAL INFORMATION

Spill response: Ventilate area. Eliminate ignition sources. Scoop material into a dry metal container and cover loosely. Take to a chemical disposal area, then flush with a copious amount of water, collecting all caustic waste water for proper disposal.

Recommended disposal: Treat quantities of 1000 grams or less by flooding with water. Water solution will be caustic. Follow all chemical pollution control regulations.

## HEALTH HAZARD DATA

Eye Contact: Potassium bis(trimethylsilyl)amide will cause immediate or delayed severe caustic burns to the eyes.

Skin contact: Will cause irritation and burns. If skin and air are dry, powder on skin may not cause irritation or burns. Worker will notice a slippery feeling on washing. However, if moisture is present, the powder can cause severe burns.

Inhalation: Inhalation will cause sneezing, irritation and burns.

Active Component Oral Toxicity: not determined;

Solvent Oral Toxicity (toluene): rat, LD50: 5000 mg/kg

Active Component Inhalation Toxicity: not determined

Solvent Inhalation Toxicity (toluene): mouse, LC50: 400ppm/24H

Chronic Toxicity- (toluene): An experimental teratogen. Human Systemic effects by inhalation.

## SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes, holding eyes open. Get medical attention.

SKIN: Immediately shake or brush off any loose material, then flush with water for at least fifteen minutes.

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Give a demulscent such as milk, olive oil, or margarine in small amounts, up to two or three tablespoons.

## REACTIVITY DATA

Stability: Stable under nitrogen or argon in sealed containers.

Conditions to avoid: Material decomposes slowly in contact with moist air and rapidly in contact with water, possibly igniting. Avoid contact with moist air, water, acids, alcohols, ketones, esters, carbon dioxide, halogens. In cases where solvent (toluene) has been removed, the compound can react violently with water, possibly igniting.

Hazardous decomposition products: potassium hydroxide, ammonia, hexamethyldisiloxane and caustic organic vapors.

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Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material information System; CAS No.: Chemical Abstract Service Registration Number  
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## SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, a NIOSH approved particulate filter-type respirator should be worn.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. Long-sleeved fire-resistant lab uniform or coverall is recommended. An eyewash and emergency shower should be available. Launder clothing before reuse.

## OTHER PRECAUTIONS

For research use only.

Storage and Handling: Store under dry nitrogen or argon in sealed containers.

## TRANSPORTATION

DOT SHIPPING NAME: CORROSIVE LIQUID, FLAMMABLE N.O.S.,  
(POTASSIUM BIS(TRIMETHYLSILYL)AMIDE, TOLUENE)

DOT HAZARD CLASS: 8 SUB: 3

DOT LABELS: CORROSIVE & FLAMMABLE LIQUID

DOT ID No: UN2920 PG: II

Prepared by safety and environmental affairs MSDS ISSUE DATE SIP6890.0: 5/30/14  
SUPERSEDES: 4/29/08

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