

# MATERIAL SAFETY DATA SHEET

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NAME USED ON LABEL: UREIDOPROPYLTRIMETHOXYSILANE

CHEMICAL NAME: UREIDOPROPYLTRIMETHOXYSILANE

SYNONYMS: (3-TRIMETHOXYSILYL)PROPYLUREA

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C7H18N2O4Si

HMIS CODES HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 1

#### **INGREDIENTS**

IDENTITY CAS NO. % TLV ACGIH OSHA UREIDOPROPYLTRIMETHOXYSILANE 23843-64-3 >95 not established METHANOL 67-56-1 <2 200ppm – skin

#### PHYSICAL DATA

Boiling Point: 217-225° Melting Point: <-25°C Specific Gravity: 1.15 Vapor Pressure, 20°: 97mm Vapor Density (air =1): >1 Solubility in water: reacts Evaporation rate: N/A

Molecular Weight: 222.32 Other: N/A

Appearance & Color: Straw to amber viscous liquid with amine (ammonia-like)

odor.

# **FIRE & EXPLOSION DATA**

Flash Point, COC: 99°C (210°F)

Autoignition Temp. not determined

Flammability Limits-methanol LEL: 6.0% UEL: 36.5%

Extinguishing Media: Water spray, foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe

fumes or inhale vapors.

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

# **ENVIRONMENTAL INFORMATION**

Spill response: May be hazardous to aquatic life if released to open waters. Cover spill with absorbent material. Transfer to a suitable container for disposal. Recommended Disposal: Hydrolyze material by mixing with water in a hood. Organic layer may be incinerated. Alternately, absorb onto clay or vermiculite and dispose of absorbent material as solid waste. Follow all chemical pollution control regulations.

#### **HEALTH HAZARD DATA**

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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 Sibond © 2010

Eye Contact: Vapors may cause immediate or delayed severe eye irritation.

Liquid can cause severe conjunctivitis and corneal damage

Skin contact: May produce irritation or contact dermatitis which may be delayed several hours. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of vapors or particulates of aminoalkylsilanes will irritate the respiratory tract. Overexposure may produce coughing, headache and nausea.

Oral Toxicity: Oral toxicity is associated with methanol, the solvent and a hydrolysis product which causes nausea, vomiting, headache, visual effects including blindness. Onset of symptoms may be delayed up to 48 hours.

Oral Toxicity- rat, LD50: >5000mg/kg

Chronic Toxicity: There are no known chronic effects related to this compound.

#### SUGGESTED FIRST AID

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

SKIN: Flush with water, then wash with soap and water.

INHALATION: Move exposed individual to fresh air. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

NOTE TO PHYSICIAN: This product contains methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

# **REACTIVITY DATA**

Stability: Stable in sealed containers.

Conditions to avoid: Combustible; avoid contact with heat, sparks or open flame. Incompatibility (materials to avoid): Reacts with water and moisture in air liberating methanol. Avoid contact with peroxides, oxidizing agents, alcohols, acids.

Hazardous decomposition products: Organic acid vapors.

## SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV air-supplied or combination organic vapor amine gas respirator.

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

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

## **OTHER PRECAUTIONS**

For research and industrial use only.

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Storage and Handling: Store in sealed containers.

# **TRANSPORTATION**

DOT SHIPPING NAME: CHEMICALS, NOI DOT HAZARD CLASS: NOT REGULATED

DOT LABELS: NOT REQUIRED DOT ID No: NOT REQUIRED

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