

GELEST, INC.

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MATERIAL SAFETY DATA SHEET EMERGENCY TELEPHONE CHEMTREC: 1-800-424-9300

NAME ON LABEL: PENTAMETHYLCYCLOPENTADIENYLTITANIUM TRIMETHOXIDE -

OMTI052

CHEMICAL NAME: PENTAMETHYLCYCLOPENTADIENYLTITANIUM TRIMETHOXIDE -

SYNONYMS:

CHEMICAL FAMILY: TITANOCENE

FORMULA: C₁₉H₁₅O₃Ti

HMIS CODES HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 1

INGREDIENTS

IDENTITY CAS NO. % TLV OSHA PEL

PENTAMETHYLCYCLOPENTADIENYLTITANIUM TRIMETHOXIDE

123927-75-3 >95 not established

PHYSICAL DATA

Boiling Point: 285°C Specific Gravity: 1.081 Vapor Density, air =1: NA

% volatiles: < 3%

Molecular Weight: 276.21

Appearance & Color: yellow liquid

Melting Point: : <10°C Vapor Pressure: <1mm Solubility in water: insoluble

Evaporation rate: NA

Other: NA

FIRE & EXPLOSION DATA

Flash Point, COC: 61°C (142°F) Autoignition Temp.: not determined

Flammability Limits- LEL: NA UEL: NA

Extinguishing Media: Water spray or fog, 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.

Abbreviations: ND: Not Determined, No Data; NA: Not Applicate Complete National 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.: Chemcial Abstract Service Registration Number Gelest, Inc. © 2008



ENVIRONMENTAL INFORMATION

Spill response: Sweep material and transfer to a suitable container for disposal.

Recommended disposal: Incinerate. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed eye irritation and may cause corneal ulceration.

Skin contact: May produce irritation or contact dermatitis. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation may irritate the respiratory tract, cause headache or nausea.

Oral Toxicity: not determined

Inhalation Toxicity: not determined

Chronic Toxicity: not determined The related compound, bis(cyclopentadienyl)titanium

dichloride, has the following findings: Tumerogenic by RTECS criteria

EPA GENETOX PROGRAM 1988, POSITIVE SHE-CLONAL ASSAY;

CELL TRANSFORM. RLV F344 RAT EMBRYO

EPA GENETOX PROGRAM 1988, NEGATIVE: HOST-MEDIATED ASSAY;

S CEREVISIAE-HOMOZYGOSIS

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. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. To conscious individual give two full cups of water to dilute ingested material. Get medical attention.

REACTIVITY DATA

Stability:

Conditions to avoid: Avoid contact with oxidizing agents. Avoid high concentrations of dust. Hazardous decomposition products: Organic acid vapors and titanium oxide.

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SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved organic vapor 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 use only.

Storage and Handling: Store in sealed containers. Do not expose to light.

TRANSPORTATION

DOT SHIPPING NAME: CHEMICALS, NOI

DOT HAZARD CLASS: not required

DOT LABEL: not required DOT ID No: not required

Prepared by safety and environmental affairs

ISSUE DATE OMTI052: 7/24/09 SUPERSEDES: none

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