

GELEST, INC.

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

NAME USED ON LABEL: ETHYL 4-(TRIETHOXYSILYL)BENZOATE, 90% - SIE4901.3

CHEMICAL NAME: ETHYL 4-(TRIETHOXYSILYL)BENZOATE

SYNONYMS: p-(TRIETHOXYSILYL)ETHYLBENZOATE

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C₁₅H₂₄O₅Si

HMIS CODES HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 1

INGREDIENTS

IDENTITY CAS NO. % TLV

ETHYL 4-(TRIETHOXYSILYL)BENZOATE 197662-64-9 >90 not established

PHYSICAL DATA

Boiling Point: 123-8°C at 0.1mm Freezing Point: < 0°C

Specific Gravity: 1.001 Vapor Pressure, 25°: <0.01mm Vapor Density (air=1): >1 Solubility in water: insoluble, reacts

% volatiles: NA Evaporation rate: NA

Molecular Weight: 240.37 Other: NA

Appearance & Color: Clear to straw liquid with mild odor

FIRE & EXPLOSION DATA

Flash Point, COC: >110°C (>230°F) Autoignition Temp.: not determined

Flammability Limits: not determined

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.

-1-(SIE4901.3)

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.: Chemcial Abstract Service Registration Number Gelest. Inc. © 2008



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: 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

On contact with water this compound liberates ethanol which is known to have a chronic effect on the central nervous system.

Eye Contact: Will cause immediate or delayed severe eye irritation.

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 may irritate the respiratory tract. Overexposure may produce coughing, headache and nausea.

Oral Toxicity: not determined

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, preferably from an ophthalmologist.

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: The hydrolysis product of this product is ethanol. Overexposure to ethanol by skin absorption, inhalation or ingestion may have a narcotic effect (headache, nausea, drowsiness). Ethanol is metabolized to acetaldehyde and acetic acid which in large quantities result in metabolic acidosis, CNS depression and death due to respiratory arrest.

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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 ethanol.

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 acid

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 use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: CHEMICALS, NOI DOT HAZARD CLASS: Not Regulated

DOT LABEL: Not Required DOT ID No: Not Required

Prepared by safety and environmental affairs ISSUE DATE SIE4901.3: 11/25/08

SUPERSEDES: none

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