

GELEST, INC.

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **INDIUM TIN ALKOXIDE - DINSN20**

CHEMICAL NAME: INDIUM TIN ALKOXIDE

SYNONYMS: DOUBLE METAL ALKOXIDE OF INDIUM AND TIN

CHEMICAL FAMILY: METAL ALKOXIDE

FORMULA: (RO)₁₅InSn₃

HMIS CODES HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 1

INGREDIENTS

IDENTITY	CAS NO.	%	TLV
TRADE SECRET			not established
METAL CONTENT: indium		1.7-2.0%	
tin		5.5-5.9%	
METHOXYETHANOL	109-86-4	>75	25ppm (skin)
SODIUM CHLORIDE	7647-14-5	<2	

PHYSICAL DATA

Boiling Point: 118-9°C - initial

Specific Gravity: 1.05-1.09

Vapor Density: 2.5-2.7

% volatiles >80%

Molecular Weight: NA

Appearance & Color: Amber solution; mild odor

Freezing Point: <0°C

Vapor Pressure: not determined

Solubility in water: reacts

Evaporation rate: NA

Other: NA

FIRE & EXPLOSION DATA

Flash Point, TCC: 48°C (118°F)

Autoignition Temp.: not determined

Flammability Limits- LEL: NA UEL: NA

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-(DINSN20)

ENVIRONMENTAL INFORMATION

Spill response: Cover spill with absorbent material. Transfer to a suitable container for disposal.

Recommended Disposal: Dispose of absorbent material as solid waste. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed severe eye irritation. The onset of irritation may not occur until several hours after exposure.

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 metal alkoxides will irritate the respiratory tract.

Oral Toxicity: Not Determined. Methoxyethanol, the solvent and hydrolysis product, toxicity is reported: oral-rat, LD50: 2460 mg/kg

Chronic Toxicity: There are no known chronic effects related to this compound. Methoxyethanol, a hydrolysis product, is known to have a chronic on the central nervous system.

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.

REACTIVITY DATA

Stability: Stable in sealed containers. Moisture or water will slowly decompose product.

Conditions to avoid: Avoid water.

Incompatibility (materials to avoid): Oxidizers.

Hazardous decomposition products: Organic acid vapors, tin oxides, indium oxides.

-2-(DINSN20)

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection:

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: FLAMMABLE LIQUID, N.O.S.
(CONTAINS METHOXYETHANOL))

DOT HAZARD CLASS: 3

DOT LABEL: FLAMMABLE LIQUID

DOT ID No: UN1993

PG: III

Prepared by safety and environmental affairs

ISSUE DATE DINSN20: 3/14/07

SUPERSEDES: 4/7/03

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