

GELEST, INC.

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **DICYCLOHEXYLPHOSPHINE - OMPH018**

CHEMICAL NAME: DICYCLOHEXYLPHOSPHINE

SYNONYMS:

CHEMICAL FAMILY: ORGANOPHOSPHORUS COMPOUND

FORMULA: C₁₂H₂₃P

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 1

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
DICYCLOHEXYLPHOSPHINE	829-84-5	>95	not established	not established

PHYSICAL DATA

Boiling Point: 129°C @ 8mm

Specific Gravity: 0.98

Vapor Density (air =1): >1

% volatiles: NA

Molecular Weight: 198.29

Appearance & Color: Clear to amber liquid with unpleasant pungent odor; fumes or ignites in air.

Melting Point: 2°C

Vapor Pressure, 25°: <0.1mm

Solubility in water: insoluble, reacts slowly

Evaporation rate: NA

Other: NA

FIRE & EXPLOSION DATA

PYROPHORIC- MAY IGNITE SPONTANEOUSLY ON CONTACT WITH AIR

Flash Point, COC: 110°C (230°F)

Autoignition Temp.: not determined

Flammability Limits: not determined

Extinguishing Media: Dry chemical powder followed by sand or dolomite

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

Unusual Fire and Explosion Hazards: In contact with combustible materials such as paper and textiles, ignites spontaneously in air. Irritating fumes and organic acid vapors will develop when material is exposed to elevated temperatures or open flame.

-1-(OMPH018)

ENVIRONMENTAL INFORMATION

Spill response: Cover with dry chemical extinguishing powder, lime, sand or soda ash. Do not use water. Remove sources of ignition. Remove combustible materials in the vicinity of the spill. Allow time for decomposition or fire to burn out, then sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Incinerate. Follow all chemical pollution control regulations. This is a RCRA hazardous waste: 40 CFR 261.21 (i.e. ignitable) 40 CFR 261.23 (i.e. reactive)

HEALTH HAZARD DATA

Eye Contact: Will cause immediate or delayed severe burns to the eyes.

Skin contact: Will cause irritation and burns.

Inhalation: Direct respiratory contact is usually not possible, but will cause burns. Inhalation of combustion products can cause irritation.

Oral Toxicity - rat, LD50: 215mg/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. 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 one full cup of water to dilute ingested material. Get medical attention.

REACTIVITY DATA

Stability: Stable in sealed containers under dry inert atmosphere. Oxidizes in air. Will ignite spontaneously in contact with high surface area combustibles such as paper and textiles.

Conditions to avoid: Contact with air and oxygen should be avoided. Store away from alkalis, oxidizers, metal salts, precious metals, chlorine, bromine. Reacts violently with dimethylsulfoxide.

Hazardous decomposition products: Organic phosphine vapors and phosphorus oxides.

-2-(OMPH018)

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: Full face shield with chemical workers goggles.

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.

Storage and Handling: Store in sealed containers under inert atmosphere.

PYROPHORIC- MAY IGNITE SPONTANEOUSLY ON CONTACT WITH AIR

Product will ignite spontaneously if heated.

TRANSPORTATION

DOT SHIPPING NAME: PYROPHORIC LIQUID, ORGANIC, N.O.S (DICYCLOHEXYLPHOSPHINE)

DOT HAZARD CLASS: 4.2

DOT LABEL: FLAMMABLE LIQUID

DOT ID No: UN2845

PG: I

Air transport forbidden.

Prepared by safety and environmental affairs

ISSUE DATE: OMPH018: 5/7/12

SUPERSEDES: none

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