

Trimorpholinophosphine oxide 4441-12-7 MSDS

Section 1. IDENTIFICATION

Product name: Trimorpholinophosphine Oxide

Revision number: 5

Section 2. HAZARDS IDENTIFICATION

GHS classification

PHYSICAL HAZARDS Not classified

Not classified

HEALTH HAZARDS

ENVIRONMENTAL HAZARDS Not classified

GHS label elements, including precautionary statements

Pictograms or hazard symbols None

No signal word

Signal word

Hazard statements None

None

Precautionary statements:

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: Trimorpholinophosphine Oxide

Percent: >98.0%(GC)

CAS Number: 4441-12-7

Synonyms: Phosphoric Trimorpholide

Chemical Formula: C12H24N3O4P

Section 4. FIRST AID MEASURES

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical advice/attention if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion: Get medical advice/attention if you feel unwell. Rinse mouth.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

Section 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

Specific hazards arising from the chemical: Take care as it may decompose upon combustion or in high temperatures to

generate poisonous fume.

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Section 5. FIRE-FIGHTING MEASURES

Precautions for firefighters: Fire-extinguishing work is done from the windward and the suitable fire-extinguishing

method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.

Special protective equipment for firefighters: When extinguishing fire, be sure to wear personal protective equipment.

equipment for firefighters:

Section 6. ACCIDENTAL RELEASE MEASURES

Use personal protective equipment. Keep people away from and upwind of spill/leak.

Personal precautions, protective equipment and emergency procedures: Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions: Prevent product from entering drains.

Methods and materials for containment and cleaning: Sweep dust to collect it into an airtight container, taking care not to disperse it.

Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Section 7. HANDLING AND STORAGE

Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment.

Technical measures:

Prevent dispersion of dust. Wash hands and face thoroughly after handling.

Use a local exhaust if dust or aerosol will be generated.

Advice on safe handling: Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Install a closed system or local exhaust as possible so that workers should not be

Engineering controls:

exposed directly. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Safety glasses. A face-shield, if the situation requires.

Skin and body protection: Protective clothing. Protective boots, if the situation requires.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal- Powder

Colour: White - Almost white

Odour: No data available

pH: No data available

Melting point/freezing point:191°C

No data available

Boiling point/range:

Flash point: No data available

Flammability or explosive

limits:

No data available

Lower:

Upper: No data available

No data available

Relative density:

Solubility(ies):

No data available

[Water]

[Other solvents] No data available

1.38

Log Pow:

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Section 10. STABILITY AND REACTIVITY

Chemical stability: Stable under proper conditions.

Possibility of hazardous No special reactivity has been reported.

reactions:

Incompatible materials: Oxidizing agents

Hazardous decomposition Carbon monoxide, Carbon dioxide, Nitrogen oxides (NO_x),

Phosphorus oxides

products:

Section 11. TOXICOLOGICAL INFORMATION

No data available

Acute Toxicity:

Skin corrosion/irritation: No data available

No data available

Serious eye

damage/irritation:

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC = No data available

NTP = No data available

No data available

Reproductive toxicity:

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity:

No data available

Fish:

Crustacea: No data available

Algae: No data available

Persistence / degradability: No data available

Bioaccumulative potential(BCF): No data available

Mobility in soil

Log Pow: 1.38

No data available

Soil adsorption (Koc):

Henry's Law constant(PaM³/mol): No data available

Section 13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material

with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system.

Observe all federal, state and local regulations when disposing of the substance.

Section 14. TRANSPORT INFORMATION

Hazards Class: Does not correspond to the classification standard of the United Nations

Not listed

UN-No:

Section 15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (State Council announces

on January 26, 2002

and revised on February 16,2011): Safe use and production, the storage of a dangerous chemical, transport,

loading and unloading were prescribed.

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SECTION 16 - ADDITIONAL INFORMATION

N/A
