

Website:- chemicalbull.com MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Triphenylphosphine Oxide

CAS-No. : 791-28-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Chemical Bull Pvt Ltd

123/124, Panchratna, G.I.D.C Char Rasta, Vapi-396195 Dist, Valsad, Gujarat, INDIA **Website:**- chemicalbull.com

Email: info@chemicalbull.com

1.4 Emergency telephone

Emergency Phone : +91 9696960250

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification according to Regulation

Acute toxicity, Oral

Long-term (chronic) aquatic hazard

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

**Labelling according Regulation** 

Pictogram

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctorif you feel

unwell.

P501 Dispose of contents/ container to an approved waste disposal

plant.

Supplemental Hazard

Statements

none

# Reduced Labeling (<= 125 ml)

Pictogram

Signal word Warning

Hazard statement(s)

H412 Harmful to aquatic life with long lasting effects.

Precautionary none

statement(s)

Supplemental Hazard

Statements

none

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# SECTION 3: Composition/information on ingredients

## 3.1 Substances

Synonyms : Ph3PO

Formula :  $C_{18}H_{15}OP$  Molecular weight : 278.28 g/mol CAS-No. : 791-28-6

Component		Classification	Concentration
Triphenylphosphine oxide			
CAS-No.	791-28-6	Acute Tox. 4; Aquatic Chronic 3; H302, H412	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first-aid measures

#### General advice

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 4.3 Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

## Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

# Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Oxides of phosphorus

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

# 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

#### 5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

#### 6.2 Environmental precautions

Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

#### 6.4 Reference to other sections

For disposal see section 13.

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

## Storage conditions

Tightly closed. Dry.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Ingredients with workplace control parameters

# 8.2 Exposure controls

# Personal protective equipment

#### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as Safety glasses

#### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in please contact the supplier of approved gloves

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in please contact the supplier of approved gloves

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

**Body Protection** protective clothing

# **Respiratory protection**

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

# Control of environmental exposure

Do not let product enter drains.

# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

Color: white, to, light yellow

b) Odorc) Odor Thresholdd) pHNo data availableNo data available

e) Melting Melting point/range: 150 - 157 °C - lit.No

point/freezing point

f) Initial boiling point data available and boiling range

g) Flash point 180 °C

h) Evaporation rate No data availablei) Flammability (solid, No data available

gas)

explosive limits

j) Upper/lower No data available flammability or

k) Vapor pressure No data availablel) Vapor density No data available

m) Water solubility 369 g/l at 20 °C - Regulation

slightly soluble

n) Partition coefficient:n-

octanol/water

log Pow: 2,8 - Bioaccumulation is not expected.No

o) Autoignition

temperature

data available

p) Decomposition

temperature

No data available

q) Viscosity Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

r) Explosive properties No data availables) Oxidizing properties No data available

#### 9.2 Other safety information

No data available

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

#### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

#### 10.4 Conditions to avoid

Strong heating.

#### 10.5 Incompatible materials

Strong oxidizing agents

# 10.6 Hazardous decomposition products

In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - male and female - 685 mg/kg

(OECD Test Guideline 401) Inhalation: No data available Dermal: No data available

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

Remarks: (ECHA)

## Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Remarks: (ECHA)

# Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

## Germ cell mutagenicity

Test Type: Ames test

Test system: S. typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: (External MSDS)

#### Carcinogenicity

No data available

## Reproductive toxicity

No data available

# Specific target organ toxicity - single exposure

No data available

## Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

#### 11.2 Additional Information

RTECS: SZ1676000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

# **SECTION 12: Ecological information**

## 12.1 Toxicity

No data available

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 42,7 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Desmodes mus subspicatus (green algae) - 20,4

mg/l - 72 h (DIN 38412)

# 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 0 % - Not readily biodegradable.

(OECD Test Guideline 301F)

### 12.3 Bioaccumulative potential

No data available

# 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other adverse effects

Discharge into the environment must be avoided.

## **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

#### **Product**

See for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

# 14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

## 14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

# 14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

## 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### 14.6 Special precautions for user

#### **Further information**

Not classified as dangerous in the meaning of transport regulations.

#### **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation

#### Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir national regulations where applicable.

Take note on the protection of young people at work.

## 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H412 Harmful to aquatic life with long lasting effects.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Chemical Bull Pvt Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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