



Regd. Off. : 1501, Vikram Tower, Rajendra Place,

New Delhi-110008, (India)

Phones: 91-11-41538383 (8 Lines) Fax: 41538600, 25727781

E-mail: info@bharatgroup.co.in

Website: www.bharatgroup.co.in

MATERIAL SAFETY DATA SHEET

MSDS No: MSDS/PHEN/FG-012

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ProductName	: Phenthoate Technical
IUPAC Name	: S- α - ethoxycarbonylbenzyl O, O-dimethyl Phosphorodithioate.
Manufacturer / Supplier	: Bharat Rasayan Limited 1501, Vikram Tower, Rajendra Place, New Delhi – 110008, INDIA
Emergency Phones	: +91-11-43661120,1104 Fax 43661100

2 Composition/Data on components:

- **Chemical characterization:**

- **Description: (CAS#)**

- o,o- dimethyl-S- α -ethoxycarbonyl benzyl phosphorodithioate.

- (CAS# 2597-03-7) (90%)
- Mole wt: 320.36
- Mole formula: C₁₂H₁₇O₄PS₂
- **Identification number(s):**
- RTECS No. A17875000
- UN No. 2810

EC Number: 219-997-0

3 Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 4),

H302 Acute toxicity, Inhalation (Category 2),

H330 Acute toxicity, Dermal (Category 4),

H312 Acute aquatic toxicity (Category 1),

H400 Chronic aquatic toxicity (Category 1),

H410 For the full text of the H-Statements mentioned in this Section,

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008



Pictogram

Signal word Danger

Hazard statement(s)

H302 + H312 Harmful if swallowed or in contact with skin H330 Fatal if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

P284 Wear respiratory protection.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

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

4 First aid measures

- **After inhalation**

Remove from exposure and move to fresh air. If required, provide artificial respiration.

Seek immediate medical advice.

- **After skin contact**

Immediately wash with plenty of water at least 15 minutes while removing contaminated clothing and shoes.

Seek immediate medical advice.

- **After eye contact**

Rinse opened eye under running water for at least 15 min immediatly. Then consult a doctor immediately.

After swallowing

Seek immediate medical advice.

5 Fire fighting measures

- **Suitable extinguishing agents**

Use dry chemical, foam or Carbon dioxide extinguishing media.

Protective equipment:

Wear self-contained respirator.

Wear fully protective cloths.

6 Accidental release measures

- **Person-related safety precautions:**

Wear suitable protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- **Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting: Absorb spill with inert material(e.g. vermiculite, sand or earth), then place in suitable container. Ensure adequate ventilation.

7 Handling and storage

- **Handling**

- **Information for safe handling:**

Keep container tightly sealed.

- Store in cool, dry place in tightly closed containers.

- Ensure good ventilation at the workplace.

- **Information about protection against explosions and fires:**

Keep ignition sources away.

- **Storage**
- **Requirements to be met by storerooms and receptacles:**
No special requirements.
- **Information about storage in one common storage facility:**
Store away from oxidizing agents.
Further information about storage conditions:
Keep container tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:**
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Components with limit values that require monitoring at the workplace:
- **Additional information:** No data
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
Use suitable respirator when high concentrations are present.
- **Protection of hands:**
Use protective gloves
Check protective gloves prior to each use for their proper condition.

- **Material of gloves**

The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

- **Eye protection:** Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties:

- **General Information**

- **Form:** Viscous Liquid

- **Color:** Yellow to brown

Odor: Aromatic odor

- **Melting point/Melting range:** NA
- **Sublimation temperature / start:** Not determined
- **Vapour pressure,** : 5.3mPa at 40°C
- **Ignition temperature:** Not determined
- **Decomposition temperature:** about 275°C
- **Danger of explosion:** Not known
- **Density(water=1)** : 1.22 – 1.23
- **Solubility in / Miscibility with** Acetone, Toluene

Water: Insoluble in water

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**

Decomposition will not occur if used and stored according to specifications.

- **Hazardous polymerisation :** will not occur

- **Materials to be avoided:** not known.

Dangerous products of decomposition:

Can decompose at high temperature forming toxic gases.

11 Toxicological information

- **Acute toxicity:**
- Acute oral LD50 for rat 440 mg/kg body weight
- **Sub acute to chronic toxicity:**
Other than potential irritation (see above), no information on illness or injury to humans from acute or chronic exposure to this product is available.
- **Carcinogenicity :**
- Not listed by ACGIH,IARC,NIOSH,NTP,or OSHA.
See actual entry in RTECS for complete information.

12 Ecological information:

- **General notes:**
Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations :

- **Recommendation** Consult state, local or national regulations to ensure proper disposal.
- **Uncleaned packaging:**
Recommendation:
Disposal must be made according to official regulations.

14: **Transport information**

14.1 UN number ADR/RID: 2810 IMDG: 2810 IATA: 2810

14.2 UN proper shipping name ADR/RID: TOXIC LIQUID, ORGANIC, N.O.S.
(Phenthoate)

IMDG: TOXIC LIQUID, ORGANIC, N.O.S. (Phenthoate) IATA: Toxic liquid, organic, n.o.s. (Phenthoate)

14.3 Transport hazard class(es) ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no 14.6

Special precautions for user No

15 Regulations

Product related hazard information:

- Hazard symbols: Xn,N
- R phrases: 20-25-26-50/53
- S Phrases: S2- Keep out of reach of children.

S13-Keep away from food, drink and animal feeding stuffs.

S20/21-When using do not eat,drink or smoke.

S44-In case of accident seeks medical advice.

16. OTHER INFORMATION

The information provided in this MSDS is of general nature not specific for a particular purpose or situation, and believed to be correct and faithful. **Bharat Rasayan Limited** does not make any warranty or guarantee of any kind regarding fitness or completeness of information. **Bharat Rasayan Limited** disclaims any liability to the result(s) obtained or arising out of any use of the product or reliance on data/information contained in this MSDS.

Prepared by: Bharat Rasayan Limited: EHS Department

Issue Date: 14/05/2012.