

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** phthalic anhydride
- **Manufacturer/Supplier:**
Petrochem Middle East FZE
PO Box 17028,
Jebel Ali Free Zone
Dubai, UAE
Ph +971 4 8839222; Fax +971 4 8834133
- **Further information obtainable from:** Product safety department.
- **Information in case of Emergency** Product safety department.

2 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description**
85-44-9 phthalic anhydride
- **Identification number(s)**
- **EINECS Number:** 201-607-5
- **Index number:** 607-009-00-4

3 Hazards identification

- **Hazard description:**



Xn Harmful

- **Information concerning particular hazards for human and environment:**
R 22 Harmful if swallowed.
R 37/38 Irritating to respiratory system and skin.
R 41 Risk of serious damage to eyes.
R 42/43 May cause sensitisation by inhalation and skin contact.

4 First aid measures

- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Call for a doctor immediately.

5 Fire-fighting measures

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.

Trade name: *phthalic anhydride*

(Contd. of page 1)

- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

85-44-9 phthalic anhydride

| | |
|---------------------|--|
| PEL (USA) | 12 mg/m ³ , 2 ppm |
| REL (USA) | 6 mg/m ³ , 1 ppm |
| TLV (USA) | 6.1 mg/m ³ , 1 ppm |
| | SEN |
| WEL (Great Britain) | Short-term value: 12 mg/m ³ Long-term value: 4 mg/m ³ |
| | Sen |

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 3)

Trade name: phthalic anhydride

(Contd. of page 2)

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form: Solid
Colour: Colourless
Odour: Characteristic

· **Change in condition**

Melting point/Melting range: 130.8°C
Boiling point/Boiling range: 285 sublimiert°C

· **Flash point:** 152°C

· **Flammability (solid, gaseous):** Product is not flammable.

· **Ignition temperature:** 580°C

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: 1.7 Vol %
Upper: 10.5 Vol %

· **Vapour pressure at 20°C:** 0.00027 hPa

· **Density at 20°C:** 1.527 g/cm³

· **Solubility in / Miscibility with water at 20°C:** 6 g/l

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

| | | |
|------|------|------------------|
| Oral | LD50 | 4200 mg/kg (rat) |
|------|------|------------------|

· **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.

· **Sensitization:**

Sensitization possible through inhalation.
 Sensitization possible through skin contact.

Trade name: phthalic anhydride

(Contd. of page 3)

12 Ecological information

· **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 8 Corrosive substances.
- **Danger code (Kemler):** 80
- **UN-Number:** 2214
- **Packaging group:** III
- **Hazard label:** 8
- **Description of goods:** 2214 PHTHALIC ANHYDRIDE

· **Maritime transport IMDG:**



- **IMDG Class:** 8
- **UN Number:** 2214
- **Label:** 8
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Proper shipping name:** PHTHALIC ANHYDRIDE

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 8
- **UN/ID Number:** 2214
- **Label:** 8
- **Packaging group:** III
- **Proper shipping name:** PHTHALIC ANHYDRIDE

Trade name: phthalic anhydride

(Contd. of page 4)

15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



Xn Harmful

· **Risk phrases:**

- 22 *Harmful if swallowed.*
- 37/38 *Irritating to respiratory system and skin.*
- 41 *Risk of serious damage to eyes.*
- 42/43 *May cause sensitisation by inhalation and skin contact.*

· **Safety phrases:**

- 2 *Keep out of the reach of children.*
- 23 *Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).*
- 24/25 *Avoid contact with skin and eyes.*
- 26 *In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** *Product safety department*
- **Contact:** *Mr. Menon*