

PUYANG SHENGYUAN ENERGY TECHNOLOGY CORP

SAFETY DATA SHEET

Maleic Anhydride

SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name: Maleic Anhydride
Company: Puyang Shengyuan Energy Technology corp
Address: Park Industry Cluster, Fan County, Puyang City
457500, P. R. China
Email: Bily_he@163.com
Fax: +86-939-5331036
Emergency Phone: +86-18749905990
SDS Number: 2615070032
SDS Date: 2015-08-18

SECTION2 HAZARDS IDENTIFICATION

GHS Classification:

Physical Hazards:

Not classified.

Health Hazards:

Acute toxicity - Oral (Category 4)
Acute toxicity - Dermal (Category 5)
Skin Corrosion / irritation (Category 1B)
Serious Eye Damage/Eye Irritation (Category 1)
Sensitization - Respiratory (Category 1)
Sensitization - Skin (Category 1)
Specific target organ systemic toxicity - single exposure (Category 1) (Respiratory Organ, Digestive Tract)
Specific target organ systemic toxicity - single exposure (Category 2) (Liver)
Specific target organ systemic toxicity - repeated exposure (Category 1) (Respiratory Organ, Blood System)
Specific target organ systemic toxicity - repeated exposure (Category 2) (Kidney, Liver, Spleen)

Environmental Hazards:

Hazardous to the aquatic environment - acute hazard (Category 3)

The hazards not mentioned are not applicable or no data available.

GHS Labelling:**Pictogram:****Signal Word:**

Danger

Hazard Statements:

Harmful if swallowed.
 May be harmful in contact with skin.
 Causes severe skin burns and eye damage.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.
 Causes damage to organs (Respiratory Organ, Digestive Tract).
 May cause damage to organs (Liver).
 Causes damage to organs through prolonged or repeated exposure (Respiratory Organ, Blood System).
 May cause damage to organs through prolonged or repeated exposure (Kidney, Liver, Spleen).
 Harmful to aquatic life.

Prevention Precautionary Statements:

Do not breathe dust/fume/gas/mist/vapours/spray.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Contaminated work clothing should not be allowed out of the workplace.
 Avoid release to the environment.

Response Precautionary Statements:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 Wash contaminated clothing before reuse.
 Wash contaminated clothing before reuse.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Immediately call a POISON CENTER/doctor.
 IF exposed or concerned: Call a POISON CENTER/doctor.

Storage Precautionary Statements:

Store locked up.

Disposal Precautionary Statements:

Dispose of contents/container in accordance with local / regional / national / international regulation.

SECTION3 INFORMATION ON INGREDIENTS

Product name: Maleic Anhydride

Ingredient	Concentration	CAS No.	EC No.
Maleic anhydride	≥99.5%	108-31-6	203-571-6

SECTION4 FIRST-AID MEASURES**Skin Exposure:**

In case of skin contact, flush with copious amounts of water. Remove contaminated clothing and shoes. Call a physician.

Eye Exposure:

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Inhalation Exposure:

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Oral Exposure:

If swallowed, wash out mouth with water provided person is conscious. Call a physician. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed:

No data available.

Indication of any immediate medical attention and special treatment needed:

No data available.

SECTION5 FIRE FIGHTING MEASURES**Extinguishing Media:**

Suitable: Dry chemical, Water spray, Carbon dioxide or appropriate foam.

Special hazards arising from the substance or mixture:

May decompose upon combustion or in high temperatures to generate Carbon oxides.

Advice for firefighters:

Firemen should wear protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus. 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.

SECTION6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Remove ignition sources.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up:

Sweep up with spade and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

SECTION7 HANDLING AND STORAGE**Precautions for safe handling:**

Wear appropriate protective clothing and gloves. Do not get in eyes, skin and clothing. Avoid dust formation. Avoid inhalation. Mechanical exhaust required. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents, Alkali metals, Amines. Wash hands and face thoroughly after handling. No smoking at working site. Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents, Alkali metals, Amines.

SECTION8 EXPOSURE CONTROL/PPE**Control parameters:**

No data available.

Appropriate engineering controls:

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment:

Respiratory: Government approved respirator. Eye: Wear chemical safety goggles. Clothing: Wear chemical-resistant protective clothing. Hand: Wear chemical-resistant protective gloves.

Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION9 PHYSICAL/CHEMICAL PROPERTIES

Appearance: White blocky solid
Odor: Weak odor
Melting Point/°C: 51.5°C-53.8°C
pH Value: 1.0 (25°C, 50.0g/L)
Solubility: Weak soluble in water

SECTION10 STABILITY AND REACTIVITY**Reactivity:**

No data available.

Chemical stability:

Stable under recommended temperatures and pressures.

Possibility of hazardous reactions:

No data available.

Conditions to avoid:

No data available.

Incompatible materials:

Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents, Alkali metals, Amines.

Hazardous decomposition products:

Carbon oxides.

SECTION11 TOXICOLOGICAL INFORMATION**Acute toxicity:**

Rat Oral LD₅₀: 400 mg/kg

Rabbit Dermal LD₅₀: 2620 mg/kg

Skin corrosion/irritation:

Causes severe skin burns.

Serious eye damage/irritation:

Causes severe eye damage.

Respiratory or skin sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.

Germ cell mutagenicity:

No data available.

Carcinogenicity:

No data available.

Reproductive toxicity:

No data available.

Specific target organ toxicity - single exposure:

Causes damage to organs (Respiratory Organ, Digestive Tract).

May cause damage to organs (Liver).

Specific target organ toxicity - repeated exposure:

Causes damage to organs through prolonged or repeated exposure (Respiratory Organ, Blood System).

May cause damage to organs through prolonged or repeated exposure (Kidney, Liver, Spleen).

Harmful to aquatic life.

Aspiration hazard:

No data available.

SECTION12 ECOLOGICAL INFORMATION**Toxicity:**

Toxicity to fish static test LC₅₀ - *Oncorhynchus mykiss* (rainbow trout) - 75 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

static test EC₅₀ - *Daphnia magna* (Water flea) - 330 mg/l - 48 h

Toxicity to algae Growth inhibition EC₅₀ - *Selenastrum capricornutum* (green algae) - > 150 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria EC₁₀ - *Pseudomonas putida* - 44,6 mg/l - 18 h

(DIN 38 412 Part 8)

Persistence and degradability:

Biodegradability Biotic/Aerobic - Exposure time 28 d

Result: 73 - 81 % - Readily biodegradable

Bioaccumulative potential:

No data available.

Mobility in soil:

No data available.

Other adverse effects:

No data available.

SECTION13 DISPOSAL CONSIDERATION**Appropriate Method of Disposal of Substance:**

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with and afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION14 TRANSPORT INFORMATION

RID/ADR: Proper Shipping Name: MALEIC ANHYDRIDE
 UN Number: UN2215
 Hazard Class: 8
 Packing Group: III

IATA: Proper Shipping Name: MALEIC ANHYDRIDE
UN Number: UN2215
Hazard Class: 8
Packing Group: III

IMO: Proper Shipping Name: MALEIC ANHYDRIDE
UN Number: UN2215
Hazard Class: 8
Packing Group: III
EmS No. : F-A, S-B

SECTION15 REGULATORY INFORMATION

Regulation (EC) No.1272/2008 and its amendments:

Acute toxicity - Oral (Category 4)
Skin Corrosion / irritation (Category 1B)
Sensitization - Respiratory (Category 1)
Sensitization - Skin (Category 1)

SECTION16 OTHER INFORMATION

Date:

2015-08-18

Department:

Shanghai Research Institute of Chemical Industry Testing Centre
Tel (Fax) :8621-52815377/52800971/52807275/52811034/52569800

Revision:

0

Reference Standard:

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), 5th edition

Other 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. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from using the above information.





