## MATERIAL SAFETY DATA SHEET

DATE: FEB 1, 2020

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Purified Terephthalic Acid ( PTA )
HMIS/NFPA Codes: Health: 0 Fire: 1 Reactivity: 0

Manufacturer: Zhejiang Yisheng Petrochemical CO., LTD.
Address: NO. 8, Gangkou Road, Xiaogang, Beilun District,

Ningbo, Zhejiang Province, China

Emergency Call: 0574-86189083

## 2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Name: Purified Terephthalic Acid (PTA)
Synonym: 1, 4-Benzenedicarboxylic Acid

Percentage: 100% CAS No.: 100-21-0

## 3. HAZARDS IDENTIFICATION

Appearance: The fact that it is a crystalline solid and have low

water solubility may help to reduce the local effect.

Low toxicity.

Potential Health Effects:

Eye Contact: May causes eye irritation.

Skin Contact: May causes slight skin irritation.
Skin Absorption: No evidence of systemic effects.

Ingestion: No data available.

Inhalation: May causes irritation of upper respiratory tract.

## 4. FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes,

occasionally lifting the upper and lower eyelids. Get medical aid

immediately.

Skins: Flush skin with plenty of soap and water for at least 15 minutes

while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get



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medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air

immediately. If not breathing, give artificial respiration. If

breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

## 5. FIRE FIGHTING MEASURES

**General Information**: As in any fire, wear a self-contained breathing apparatus in pressure demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use water or foam may cause frothing. Use carbon-dioxide or dry chemical.

Flash Point: 260°C

Auto Ignition Temperature: 496°C

Explosion Limits in Air:

Lower: 50 g/m<sup>3</sup>

Upper: Not available.

Fire Fighting Procedures: Wear respiratory protection.

Unusual Fire and Explosion Hazards: Oxidation of p-xylene with nitric acid under pressure in manufacture of terephthalic acid carries explosion hazards in the autoclaves and condensing systems.

NFPA rating: Health: 0; Flammability: 1; Instability: 0.

#### 6. ACCIDENTAL RELEASE MEASURES

**General Information**: Use proper personal protective equipment as indicates in section of 'Exposure Control, Personal Protection'

**Spills/Leaks**: Clean up spills immediately, observing precautions in the protective equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

## 7. HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Remove contaminated clothing

and wash before reuse. Use only in a well-ventilated area.

Minimize dust generation and accumulation. Avoid contact with eyes, skin and clothing. Keep container tightly closed avoid

ingestion and inhalation.

## 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Country specific exposure limits have not been established or are not applicable



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unless listed below.

U.S. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 10mg/m<sup>3</sup>

U.S. California Code of Regulations, Title 8, Section 5155, Airborne Contaminants Time Weighted Average (TWA): Permissible Exposure Limited (PEL): 10mg/m<sup>3</sup>

Ventilation Requirements: Local exhaust, general ventilation

Respiratory Protection:

Hand Protection:

Eye Protection:

Other Protection Equipment:

Dust mask
Gloves
Goggles
Eye-baths

## 9. PHYSICAL AND CHEMICAL PROPERITIES

Molecular Formula:  $C_6H_4(COOH)_2$ Molecular Weight: 166.0396Physical State: Solid

Appearance: White crystals, needles or powder

Odor: Odorless

Vapor Pressure: <0.01mmHg at 20 °C

Melting Point:  $>300 \,^{\circ}\text{C}$ Decomposition Temperature:  $>400 \,^{\circ}\text{C}$ 

Solubility: 16mg/L in water

Density: 1.510g

## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, dust generation, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, acrid

smoke and fume

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Oral LD-50: (rat) >6,400 mg/kg (highest dose tested)

Oral LD-50: (mouse) 3,200-6,400 mg/kg

Dermal LD-50: (guinea pig) >5.000 mg/kg (highest dose tested)

Skin Irritation: (guinea pig) slight Eye Irritation: (rabbit) slight Skin Sensitization: (guinea pig) none



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## 12. ECOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Acute Aquatic Effects Data:

96h LC-50(fathead minnow): >100mg/L (highest concentration tested)
96h LC-50(daphnid): >100mg/L (highest concentration tested)
96h LC-50(flatworm): >100mg/L (highest concentration tested)
96h LC-50(ramshorn snail): >100mg/L (highest concentration tested)

#### 13. DISPOSAL CONSIDERATIONS

Chemical waste generator must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR pats 261.3. Additionally, waste generator must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## 14. TRANSPORT INFORMATION

Important notes: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin destination. Consult your company's Hazardous Materials/Dangerous Good expert for information specific to your situation.

DOT (USA): Class not regulated. Sea-IMDG: Class not regulated. Air-ICAO: Class not regulated.

## 15. REGULATION INFORMATION

## **US FEDERAL**

**TSCA** 

CAS No.: 100-21-0 is listed on the TSCA inventory.

#### **Health and Safety Reporting List**

None of the chemicals are on the Health and Safety Reporting list.

#### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

#### **Section 12B**

None of the chemicals are listed under TSCA Section 12B.

## **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

#### **SARA**

Section 302 (RQ)



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None of the chemicals in this material have an RQ.

## Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

## **SARA Codes**

CAS No.: 100-21-0: Acute.

#### Section 313

No chemicals are reportable under Section 313.

## Clean Air Act

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

#### **Clean Water Act**

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### **OSHA**

None of the chemicals in this product are considered highly hazardous by OSHA.

#### State

CAS No.:100-21-0 can be found on the following state right to know lists:

New Jersey, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are listed

#### **European/International Regulations**

**European Labeling in Accordance with EC Directives** 

## **Hazardous Symbols:**

ΧI

#### **Risk Phrases**

R 36/37/38 Irritating to eyes, respiratory system and skin.

#### **Safety Phrases**

S 24/25 Avid contact with skin and eyes.

## **WGK (Water Danger/Protection)**

CAS No.:100-21-0: 0 Canada – DSL/NDSL

CAS No.:100-21-0 is listed on Canada's OSL list.

#### **Canada - WHMIS**

This product has a WHMIS classification of D2B.

#### **Canadian Ingredient Disclosure List**

CAS No.:100-21-0 is list on the Canadian Ingredient Disclosure List

#### 16. ADDITIONAL INFORMATION

The information contained herein is based on current knowledge and experience;



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no responsibility is accepted that the information is sufficient in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.