



# YUFENG INTERNATIONAL CO.,LTD.

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## Material Safety Data Sheet

Issue Date: Jan 25<sup>th</sup>.2011

### 1. Substance/preparation and company identification

Supplier: YUFENG INTERNATIONAL CO.,LTD.

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Contact Information: Tel No:+86 -0510-82322996 Fax No.:+86 -510-82305996 E-mail:info@yufenggp.com

**Molecular formula:** H5DTPA

**Synonyms:** DIETHYLENETRIAMINEPENTAACETIC ACID

### 2. Composition/information on ingredients

CAS Number	Content (W/W)	Chemical name
67-43-6	99.7 %	Diethylenetriamine pentaaceticacid
139-13-9	0.3 %	nitrilotriacetic acid

### 3. Hazard identification

#### Emergency overview

WARNING: CAUSES EYE IRRITATION.

INGESTION MAY CAUSE GASTRIC DISTURBANCES.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

MAY CAUSE SKIN IRRITATION.

CONTAINS MATERIAL WHICH MAY CAUSE CANCER.

Use with local exhaust ventilation.

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Wear NIOSH-certified chemical goggles.

Wear protective clothing.

Wear chemical resistant protective gloves.

Eye wash fountains and safety showers must be easily accessible.

### **Potential health effects**

#### **Primary routes of exposure**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

#### **Medical conditions aggravated by overexposure:**

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

See MSDS section 11 - Toxicological information.

### **Potential environmental effects**

#### **Aquatic toxicity:**

The product has not been tested. The statement has been derived from products of a similar structure and composition.

## **4. First-aid measures**

#### **General advice:**

Remove contaminated clothing.

#### **If inhaled:**

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

#### **If on skin:**

Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

#### **If in eyes:**

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

#### **If swallowed:**

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention.

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

#### **Note to physician**

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

## **5. Fire-fighting measures**

#### **Suitable extinguishing media:**

dry extinguishing media, foam

#### **Unsuitable extinguishing media for safety reasons:**

carbon dioxide

#### **Additional information:**

Avoid whirling up the material/product because of the danger of dust explosion.

#### **Hazards during fire-fighting:**

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

**Protective equipment for fire-fighting:**

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

**NFPA Hazard codes:**

Health : 2 Fire: 1 Reactivity: 0 Special:

**6. Accidental release measures****Personal precautions:**

Avoid dust formation. Use personal protective clothing.

**Environmental precautions:**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

**Cleanup:**

Avoid raising dust.

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Contain with dust binding material and dispose of.

**7. Handling and storage****Handling****General advice:**

Closed containers should only be opened in well-ventilated areas.

**Protection against fire and explosion:**

Avoid dust formation. Take precautionary measures against static discharges.

**Storage****General advice:**

Keep container tightly closed and dry; store in a cool place.

**8. Exposure controls and personal protection****Personal protective equipment****Respiratory protection:**

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

**Hand protection:**

Chemical resistant protective gloves

**Eye protection:**

Tightly fitting safety goggles (chemical goggles) and face shield.

**General safety and hygiene measures:**

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Form: powder

Odour: product specific

Colour: white

pH value: 1.8 - 2.8 ( 10 g/l, 23 °C) (DIN 19268)

Melting point: > 200 °C

Bulk density: 550 - 700 kg/m<sup>3</sup>

Solubility in water: < 1 g/l ( 25 °C)

Solubility (qualitative): soluble

solvent(s): alkalies, Alkalines, non-polar solvents,

## 10. Stability and reactivity

### Hazardous reactions:

The product may contain explosive fine dust or such dust may be produced by abrasion during transport or product transfer.

### Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

### Corrosion to metals:

No corrosive effect on metal.

## 11. Toxicological information

### Acute toxicity

#### Oral:

LD50/rat: > 2,000 mg/kg

#### Skin irritation:

rabbit: non-irritant (OECD Guideline 404)

#### Eye irritation :

rabbit: Irritant. (OECD Guideline 405)

### Chronic toxicity

#### Other information:

The product has not been tested. The statement has been derived from products of a similar structure and composition.

## 12. Ecological information

### Environmental fate and transport

#### Biodegradation:

Test method: OECD 301B; ISO 9439; 92/69/EEC, C.4-C

Method of analysis: CO<sub>2</sub> formation relative to the theoretical value

Degree of elimination: 20 - 60 % (28 d)

Evaluation: Moderately/partially eliminated from water.

Experience has shown that the product is difficult to eliminate in effluent

treatment plants.

**Chemical oxygen demand (COD):**

950 mg/g

**Environmental toxicity**

**Acute and prolonged toxicity to fish:**

golden orfe/LC50 (96 h): > 100 mg/l

**Toxicity to aquatic plants:**

OECD Guideline 201 green algae/EC50: 1 - 10 mg/l

Inhibition of algal growth is due to the complexing properties of the substance and is not ascribed to an intrinsic toxicity.

**Toxicity to microorganisms:**

bacterium/EC10 (17 h): 0.2 mg/l

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

**Other ecotoxicological advice:**

Do not release untreated into natural waters.

### 13. Disposal considerations

**Waste disposal of substance:**

Do not discharge into drains/surface waters/groundwater.

Dispose of in accordance with national, state and local regulations.

**Container disposal:**

Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

**RCRA:** NA

### 14. Transport information

Reference Bill of Lading

### 15. Regulatory information

**Federal Regulations**

**Registration status:**

TSCA, US released / listed

**OSHA hazard category:** IARC 1, 2A or 2B carcinogen, NTP listed carcinogen, Chronic target organ effects reported

**SARA hazard categories (EPCRA 311/312):** Chronic

**SARA 313:**

**CAS Number**

139-13-9

67-43-6

**Chemical name**

nitrilotriacetic acid

Diethylenetriamine pentaaceticacid

**State regulations**

**State RTK**

**CAS Number**

139-13-9

**Chemical name**

nitrotriacetic acid

**State RTK**

MA, NJ, PA

**CA Prop. 65:**

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

**16. Other information****HMIS III rating**

Health: 2

Flammability: 1

Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

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For more information:

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