

# TIANJIN NORTH JINHENG CHEMICAL INDUSTRY PLANT

## material safety data sheet

ANTIOXIDANT 626

### 1. PRODUCT IDENTIFICATION

Trade Name: ANTIOXIDANT 626

Formula:  $C_{33}H_{50}O_6P_2$

Intended Use: Antioxidant/Stabilizer

Health:	2
Flammability:	1
Reactivity:	0
Personal Protection:	

#### HMIS RATING

#### Important Use Information:

This material is not intended for use in products for which prolonged contact with mucous membranes or abraded skin, body fluids, or abraded skin, or implantation within the human body, is specifically intended, unless the finished product has been tested in accordance with national and international applicable safety regulations. Because of the wide range of such potential uses, Network Performance Additives is not able to recommend this material as safe and effective for such uses and assumes no liability for such uses.

### 2. COMPOSITION & INFORMATION ON INGREDIENTS

OSHA	CAS No.	Chemical Description	Weight %
*	26741-53-7	Bis (2,4-di-tert-butylphenyl) Pentaerythritol Diphosphite	90 – 99 wt%
*	122-20-3	1,1',1''-Nitrilotris-2-Propanol Tri-isopropanolamine	0.5 1.0 wt%

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

**Appearance:** White to off-white powder

**Flammability:** Use of proper grounding techniques are recommended when emptying this product from containers weight more than 1 pound. A build-up of Hazardous electrostatic charges may cause a flash fire or explosion when the contents are emptied into a flammable atmosphere. See Section 7.

**Environmental:** The toxicity of this product to aquatic organisms is unknown. Prevent spillage or leakage to a body of water.

**Health:** This product presents little or no immediate hazard to people if spilled or released.

**Disposal:** Sweep or shovel spilled material and place into a sealed container. Pre-wet the material to prevent dust build-up. Dispose in accordance with local, state and federal regulations. Incineration is recommended. This product is not a hazardous waste under RCRA.

**Primary Route of Entry:** Dermal, inhalation

**Eye:** This product may cause eye irritation.

**Skin:** This product can cause severe skin irritation. No absorption hazard is anticipated in normal industrial use.

**Swallowing:** Small amounts, if swallowed, are not expected to cause injury; avoid swallowing.

**Inhalation:** This product is not acutely toxic and is considered to present little risk if inhaled.

Note: Refer to **Section 11, Toxicological Information** for details.

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#### **4. FIRST AID MEASURES**

- First Aid for Swallowing:** If swallowed, give at least 3-4 glasses of water, but DO NOT induce vomiting. Do not give anything by mouth to an unconscious or convulsing person.
- First Aid for Skin:** Following skin contact, wipe away excess material with a dry towel. Then wash affected areas with plenty of water and soap, if available, for several minutes. Get medical attention if irritation develops or persists.
- First Aid for Inhalation:** If inhaled and symptoms develop, remove the victim from the source of the contamination to fresh air and get medical attention if respiratory irritation develops, or if breathing becomes difficult.
- First Aid for Eye:** Following eye contact, flush eyes with plenty of water for several minutes. After initial flushing remove any contact lenses. Get medical attention if irritation occurs.
- Note to Physician:** None known.

#### **5. FIRE FIGHTING MEASURES**

- Flash Point:** > 334°F (>168°C)
- Extinguishing Media:** Carbon dioxide, dry chemical, foam
- Combustion Products:** Carbon dioxide, carbon monoxide, hydrocarbons, phosphorus compounds and phosphorus oxides
- Unusual Hazards:** The product can form an explosive dust/air mixture. Avoid dust formation and control ignition sources. Employ grounding, venting and explosion relief provisions in accord with accepted engineering practices in process operations capable of generating dust and/or static electricity.
- Fire Fighting Instructions:** Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to hazardous vapors and decomposition products.

#### **6. ACCIDENTAL RELEASE MEASURES**

- Spill or Release Procedures:** Pre-wet material with water to avoid dust formation. Vacuum and place spilled materials and contaminated soil into dry impervious containers for disposal. Wear protective equipment as specified below. Avoid creating dusty conditions. Flush residue with water.

#### **7. HANDLING AND STORAGE**

- Handling:** Wash thoroughly after handling and before eating, drinking, or using tobacco products. In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid contact with eyes and prolonged or repeated skin contact. Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. For industrial use ONLY.
- Storage:** Keep container tightly closed when not in use and during transport. Store in a cool DRY place. Avoid exposure to high humidity or high moisture conditions to maintain product integrity and minimize hydrolysis effects.

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**Explosion Hazards:**

- *For All Packages:*

**DANGER~ EXPLOSION RISK**

- Risk of explosion if an air-dust mixture forms
- Avoid creating dusty conditions
- Empty only into grounded containers
- If container is larger than 550 US gallons (2m<sup>3</sup>) in volume, or when flammable solvents are present, the container must be inverted(with inert gas flush) or the system otherwise designed to prevent or contain an explosion-see expert advise.
- *In addition, for products packaged in fused-lined (coated) fiber drums, fiber drums with conductive liner, steel drums, steel pails or bulk bags, the following instructions apply:*
  - Always ground the package before emptying
- *For products that have external protective packaging, discharge product only from the primary product packaging, NOT from external containers or its liner.*

The user is responsible for designing a system that safely handles solid additives and to ensure proper training of employees in the system's use.

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**8. EXPOSURE CONTROL / PERSONAL PROTECTION**

- Engineering Controls:** Work in well-ventilated areas. Ventilation requirements must be locally determined to limit exposure in the workplace. Design techniques and guidelines may be found in publications such as Industrial Ventilation, available from the American Conference of Governmental Industrial Hygienists, Committee on Industrial Ventilation, Lansing, MI.
- General Protection:** Wear coveralls. Avoid contact with skin
- Eye/Face Protection:** Wear safety glasses or goggles if eye contact is possible.
- Skin Protection:** Wear chemically resistant gloves as a standard handling procedure.
- Respiratory Protection:** Use NIOSH-approved respirator suitable for respirable dusts, if TLV is exceeded. Respiratory protection may be required in addition to ventilation depending upon conditions of use.

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**9. PHYSICAL AND CHEMICAL PROPERTIES:**

- Appearance:** White to off-white powder
- Odor:** Slight odor
- Boiling Point:** Not Applicable
- Evaporation Rate:** Not Applicable
- Freezing/Melting Point:** 160°C [320°F]
- Decomposition Temperature:** > 350°C [>662°F]
- Specific Gravity:** ~ 1.0 [H<sub>2</sub>O = 1]
- Vapor Density:** Negligible
- % Volatile:** Not established
- Vapor Pressure:** Negligible
- Solubility:** Insoluble at 68°F
- Oil/Water Coefficient:** Not established
- Ignition:** 168°C [334°F] .

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## 10. STABILITY AND REACTIVITY

- Chemical Stability:** Stable under recommended conditions of storage and handling.
- Incompatibility with other Materials:** Strong oxidizing agents, strong acids, strong bases. Will react to hydrolyze with water; reaction rate will increase with increasing temperatures and pressures, thus losing desired effectiveness.
- Hazardous Decomposition Products:** Thermal decomposition and burning may produce carbon monoxide, carbon dioxide, phosphorus compounds, phosphorus oxides and other toxic compounds. Hydrolysis products may include phosphorous acid, alkylphenols and polyfunctional alcohols.
- Hazardous Polymerization:** Will not occur.

## 11. TOXICOLIGICAL INFORMATION

- Acute Oral Toxicity:** LD50 (Rats): > 5,000 mg/kg
- Acute Dermal Toxicity:** LD50 (Rabbit): > 2,000 mg/kg
- Skin Irritation:** This material is expected to be a moderate to severe irritant based upon animal data.
- Eye Irritation:** No data available; may cause severe irritation.
- Sensitization:** No data available.
- Mutagenicity:** Ames test: Non-mutagenic in bacterial assay both in presence and absence of metabolic activation.
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|--|------------|
| Nucleus anomaly test:                        | Not tested |
| Chromosome study in somatic cells:           | Not tested |
| Chromosome study :                           | Not tested |
| Dominant lethal study:                       | Not tested |
| Saccharomyces cerevisiae MP-1:               | Not tested |
| Sister chromatid exchange (Chinese hamster): | Not tested |
- Teratogenicity/Reproductive Toxicity:** Not tested
- Subchronic Toxicity:** Rats (20/sex/group) were fed the test substance for 90 days at dietary concentrations of 0, 100, 300 or 1,000ppm. Slight extramedullary hematopoiesis in the liver and spleen were observed for those animals receiving the high dose. The No Observable Adverse Effect Level (NOAEL) was 300 ppm. Beagle dogs (4/sex) were fed 0, 4, 12 and 40 mg/kg/day for 4 months. Those animals at the highest dose showed clinical and histopathological evidence of neurotoxicity only in females.
- Target Organs:** Blood and Nervous System
- Chronic Toxicity/Carcinogenicity:**
- |                   |               |
|-------------------|---------------|
| Carcinogenic NTP: | Not tested    |
| OSHA:             | Not Regulated |
| IARC:             | Not Listed    |
- Neurotoxicity:** This product was not found to cause acute delayed neurotoxicity in hens following a single dose of up to 6.8 mg/kg on Day 1 and again on Day 21
- NOTE:** Rats (30/sex/group) were fed dietary concentrations of 0, 100 or 500ppm for 2 years. No treatment related toxic effects were observed.

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## **12. ECOLOGICAL INFORMATION:**

No ecological information available.

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## **13. DISPOSAL CONSIDERATIONS:**

Incinerate in a chemical incinerator equipped with an after-burner and scrubber. Follow all federal, state and local regulations.

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## **14. TRANSPORT INFORMATION:**

This product is not regulated by any means of transport.

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## **15. REGULATORY INFORMATION:**

### **Chemical Weapons Convention (CWC):**

This product does not contain any chemicals listed under the Chemical Weapons Convention Schedule of Chemicals.

### **US Federal Regulations:**

#### **Clean Air Act – Hazardous Air Pollutants (HAP):**

This product contains no hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act.

#### **Clean Air Act – Ozone Depleting Substances (ODS):**

This product does NOT contain nor was manufactured with any Class I or Class II ozone depleting substances (ODS) as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).

#### **Clean Water Act – Priority Pollutants (PP):**

This product contains no priority pollutants listed under the U.S. Clean Water Act Section 307 (2)(1) Priority Pollutant List (40CFR 401.5).

#### **FDA: Food Packaging Status:**

This product has been cleared by the FDA for use in food packaging and/or other applications as an indirect food additive. Call for further detailed information.

#### **Occupational Safety and Health Act (OSHA):**

This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29CFR 1910.1200). Its hazards are: Fire and the sudden release of pressure (explosion) hazard.

#### **Resource Conservation and Recovery Act (RCRA):**

This product is not considered to be a hazardous waste under RCRA (40 CFR 261).

#### **SARA Title III: Section 302 – Extremely Hazardous Substances (EHS):**

This product does not contain any chemicals regulated under Section 304 (40 CFR 355) as extremely hazardous substances.

#### **SARA Title III: Section 304 – CERCLA:**

This product does not contain any chemicals regulated under Section 304 (40 CFR 302) as hazardous substances.

#### **SARA Title III: Section 311/312 – Hazard Communication Standard (HCS):**

This product is regulated under Section 311-312 (40 CFR 370).

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**SARA Title III: Section 313 Toxic Chemical List (TCL):**

This product does not contain a toxic chemical for routine annual Toxic Chemical Release Reporting' under Section 313 (40 CFR 372).

**TSCA Section 5(e) – Consent Order / SNUR:**

This product is not subject to a section 5(e) Consent Order or Significant New Use Rule (SNUR).

**TSCA Section 8(b) – Inventory Status:**

All Chemical(s) comprising this product are either exempt or listed on the TSCA inventory.

**TSCA Section 12(b) – Export Notification:**

This product does not contain any chemicals subject to Section 12(b) export notification.

**International Regulations:**

**Australian Inventory Status:**

This product contains only chemicals that are currently listed on the Australian Inventory of Chemical Substances.

**Canadian Inventory Status:**

This product contains only chemical that are currently listed on the Canadian Domestic Substance List (CDL).

**European Inventory Status (EINECS):**

This product contains only chemicals that are currently listed on the European Inventory of Existing Commercial Chemical Substances (EINECS).

**Korean Inventory Status:**

This product contains only chemicals that are currently listed on the Korean Chemical Substances List.

**Japanese Inventory Status:**

This product contains only chemicals currently listed on the Japanese Ministry of International Trade and Industry List of Existing and New Chemical Substances.

**Additional International Information:**

This product contains only chemical that are currently listed on the Philippine Inventory of Chemical Substances.

**State Regulations:**

**California Proposition 65:**

This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

**Massachusetts Right-to-Know:**

This product does not contain any chemicals that are subject to Massachusetts Right-to-Know disclosure requirement.

**New Jersey Right-to-Know:**

The following is required composition information:

*Chemical Name:* Bis (2,4-di-tert-butylphenyl) pentaerythritol diphosphate  
*Common Name:* ELC-626  
*CASRN:* 26741-53-7

*Chemical Name:* 1, 1', 1''-nitriлотris-2-propanol  
*Common Name:* Tri-isopropanol Amine  
*CASRN:* 122-20-3

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**Pennsylvania Right-to-Know:**

The following is required composition information:

*Chemical Name:* Bis (2,4-di-tert-butylphenyl) pentaerythritol diphosphite

*Common Name:* ELC-626

*CASRN:* 26741-53-7

*Chemical Name:* 1, 1', 1''-nitrilotris-2-propanol

*Common Name:* Tri-isopropanol Amine

*CASRN:* 122-20- *Comment:* NOT on the Pennsylvania Hazardous Substance List

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**16.OTHER INFORMATION**

- Disclaimer:** The information and recommendations contained herein are based upon data believed to be correct. However, NO guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This Safety Data Sheet is current at the time of printing. Thereafter, it must not be construed as definitive with regard to any regulatory context.
- Information Contact:** For technical information contact your technical sales representative. For additional health / safety / regulatory information, contact Product Safety at (888) 291-1743.
- Label Text:** EC Labeling – None required