

TIANJIN NORTH JINHENG CHEMICAL AND INDUSTRY PLANT

UV ABSORBER 329

1. PRODUCT IDENTIFICATION

Trade Name: UV ABSORBER 329

Formula: C₂₀H₂₅ClN₃O

Intended Use: UV Absorber

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|-----------------------------|----------|
| Health: | 1 |
| 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 Identity | Weight % |
|------|-----------|---|-------------|
| * | 3147-75-9 | 2-(2-Hydroxy-5-(tert)-octyl-phenyl) benzotriazole | 98 – 100wt% |

* = non OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: Light yellow 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: This product is moderately toxic to aquatic organisms. Prevent spillage or leakage into 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 and inhalation

Eye: This product is not expected to cause eye irritation.

Skin: This product is not expected to cause skin irritation. It is not expected to cause allergic skin reactions based upon test results.

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

Inhalation: This product is not expected to cause respiratory irritation.

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 occurs.
- First Aid for Inhalation:** If inhaled, remove from area to fresh air. 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. Get medical attention if irritation occurs.
- Note to Physician:** None known.

5. FIRE FIGHTING MEASURES

- Flash Point:** > 302°F (> 150°C)
- Extinguishing Media:** Carbon dioxide, dry chemical, foam, water mist
- 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:** Use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- Spill or Release Procedures:** Pre-wet material with water to avoid dust formation. Sweep or vacuum and place in sealable container for disposal. Wear protective equipment as specified below. 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. Do NOT swallow and do NOT inhale dust. Use only with adequate ventilation. For industrial use ONLY.
- Storage:** Keep container tightly closed when not in use and during transport.
- 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

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- If container is larger than 550 US gallons (2m^3) in volume, or when flammable solvents are present, the container must be inerted (with inert gas flush) or the system otherwise designed to prevent or contain an explosion-seek 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.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

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| Engineering Controls: | Work in well-ventilated areas. |
| General Protection: | Wear coveralls. |
| Eye/Face Protection: | Wear safety glasses or goggles if eye contact is possible. |
| Skin Protection: | Wear impervious gloves as a standard handling procedure. |
| Respiratory Protection: | Use NIOSH-approved respirator suitable for respirable dusts if TLV is exceeded. |

9. PHYSICAL AND CHEMICAL PROPERTIES:

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|-----------------------------------|---|
| Appearance: | Light yellow powder |
| Odor: | Mild odor |
| Boiling Point: | Not applicable |
| Evaporation Rate: | Not Applicable |
| Freezing/Melting Point: | 103 - 105°C [217 - 221°F] |
| Decomposition Temperature: | > 350°C [>662°F] |
| Specific Gravity: | ~ 1.18 |
| Vapor Density: | Not Applicable |
| % Volatile: | < 0.2% |
| Vapor Pressure: | 1×10^{-5} mm HG at 20°C |
| pH: | 5.6 at 500 gm/l for 1% water suspension |
| Solubility: | < 1 ppm in water at 20°C (68°F) |
| Octanol/Water Coefficient: | > 6Log Po/w 2.4 |
| Ignition: | 420°C BAM |

10. STABILITY AND REACTIVITY

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| Chemical Stability: | Stable |
| Incompatibility with other Materials: | Strong oxidizing agents |
| Hazardous Decomposition Products: | Burning or thermal decomposition may produce carbon monoxide, carbon dioxide, nitrogen oxides and other toxic compounds. |

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Hazardous Polymerization: Will not occur.

11. TOXICOLIGICAL INFORMATION

Acute Oral Toxicity: LD50 (Rats) > 10,000 mg/kg
Acute Dermal Toxicity: LD50 (Rabbits) > 5,000 mg/kg
Skin Irritation: (Rabbits) Not an irritant
Eye Irritation: (Rabbits) Not an irritant
Sensitization: RIPT (Humans) is not a sensitizer.
(Guinea pigs) Not a sensitizer in maximization test (0/20 positive).
Mutagenicity: Ames/E. Coli test: Non-mutagenic

12. ECOLOGICAL INFORMATION

Acute Toxicity to Fish: Zebra fish, 96-hour LC50: > 100ppm
Acute Toxicity to Invertebrates: Daphnia magna, 24-hour, EC50: 15ppm
Acute Toxicity to Algae: Green Algae, 0 – 17 hour, EC50: >100ppm
Toxicity to Sewage Bacteria: Inhibitory concentrate on respiration of aerobic wastewater bacteria: IC20, IC50, IC80: >100ppm
Bioconcentration: BCF = 4790 x in Carp (Average value at plateau, weeks 6-8)
Biodegradability: Modified Sturm test: Not readily biodegradable, 0-1% in 28 days

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

This product is not regulated by any means of transport.

15. REGULATORY INFORMATION:

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.

Clear 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). This is based upon existing knowledge from our current supplier base.

Clean Water Act – Priority Pollutants (PP):

This product contains no chemicals listed under the U.S. Clean Water Act Priority Pollutant List.

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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 contains no chemicals regulated under Section 302 as extremely hazardous substances.

SARA Title III: Section 304 – CERCLA:

This product contains no chemicals regulated under Section 304 as extremely hazardous chemicals for emergency release notification (“CERCLA” List).

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

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

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 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.

Additional Federal Information:

This product is not subject to a Section 5(f)/6(a) rule.

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 chemicals that are currently listed on the Canadian Domestic Substance List.

European Inventory Status (EINECS):

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

Japanese Inventory Status:

This product contains only chemicals currently listed on the Japanese Ministry of International Trade and Industry (MITI) 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.

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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: 2-(2-Hydroxy-5-(tert)-octylphenyl) benzotriazole

Common Name: ELC-329

CASRN: 3147-75-9

Pennsylvania Right-to-Know:

The following is required composition information:

Chemical Name: 2-(2-Hydroxy-5-(tert)-octylphenyl) benzotriazole

Common Name: ELC-329

CASRN: 3147-75-9

Comment: NOT on the Pennsylvania Hazardous Substance List

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.

Information Contact:

For technical information contact your technical sales representative. For additional health / safety / regulatory information, contact Product Safety at (888) 291-1743.