

MATERIAL SAFETY DATA SHEET

Date Updated: 02-05-2021

Section 1 - Product and Company Information

Product Name: 5-nitro-2,4-dihydro-3H-1,2,4-triazol-3-one
Product Number: PW1149
Company: Anichem, Inc.
Address: 195 Black Horse Lane, North Brunswick, NJ 08902, USA
Technical Phone: 1-732-8216500
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Section 2 - Composition/Information on Ingredient

Substance Name: 5-nitro-2,4-dihydro-3H-1,2,4-triazol-3-one
CAS #: 932-64-9
Formula: C2H2N4O3

Section 3 - Hazards Identification

1) Hazard pictogram: GHS01: Exploding bomb



2) Signal words: Danger

3) GHS hazard statement(s)

H201: Explosive; mass explosion hazard

H315: Causes skin irritation

H319: Causes serious eye irritation

H335: May cause respiratory irritation

4) GHS precautionary statement(s)

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

INHALATION EXPOSURE

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

DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. 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.

Section 5 - Fire Fighting Measures

1) Extinguishing media

Extinguishing media: Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the surrounding fire should be used.

2) Special hazards arising from the substance or mixture

Exposure hazards: Explosive. May form flammable / explosive dust-air mixture. In combustion emits toxic fumes. Carbon oxides. Nitrogen oxides (NOx).

3) Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Notify the police and fire brigade immediately. Eliminate all sources of ignition.

METHODS FOR CLEANING UP

Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

Section 7 - Handling and Storage

Handling:

Smoking is forbidden. Keep container tightly closed. Close container after use or when empty. Use non-sparking tools. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of dust in the air. Only use in fume hood.

Storage:

Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US)

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance Physical State: Solid

Molecular Weight: 130.06

Melting point/range °C: 254

Other information: No data available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Materials to Avoid: Strong oxidising agents. Strong acids.

Conditions to avoid: Heat. Hot surfaces. Sources of ignition. Flames.

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.
Nitrogen oxides (NOx).

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Multiple Routes: Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Disposal operations: MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

Disposal of packaging: Dispose of as special waste in compliance with local and national regulations. Observe all federal, state and local environmental regulations.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14 - Transport Information

1) UN number

UN number: UN0490

2) UN proper shipping name

Shipping name: NITROTRIAZOLONE (NTO)

3) Transport hazard class(es)

Transport class: 1

4) Packing group

5) Environmental hazards

Environmentally hazardous: No Marine pollutant: No

6) Special precautions for user

Tunnel code: B1000C

Transport category: 1

Section 15 - Regulatory Information

1) Safety, health and environmental regulations/legislation specific for the substance or mixture

2) Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Anichem shall not be held liable for any damage resulting from handling or from contact with the above product.