

## 1H-1,2,4-triazole 288-88-0 MSDS

Name:	1 2 4-1h-triazole 99+% flakes Material Safety Data Sheet
Synonym:	
CAS:	288-88-0

### Section 1 - Chemical Product

MSDS Name:1 2 4-1h-triazole 99+% flakes Material Safety Data Sheet

Synonym:

### Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
288-88-0	1, 2, 4-1H-TRIAZOLE	99+%	206-022-9

Hazard Symbols: XN

Risk Phrases: 22 36 63

### Section 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Harmful if swallowed. Irritating to eyes. Possible risk of harm to the unborn child.

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

May be harmful if absorbed through the skin.

Ingestion:

Harmful if swallowed. May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation. May be harmful if inhaled.

Chronic:

Not available.

### Section 4 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Remove from exposure and move to fresh air immediately.

Notes to Physician:

## **Section 5 - FIRE FIGHTING MEASURES**

General Information:

Combustion generates toxic fumes. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

## **Section 6 - ACCIDENTAL RELEASE MEASURES**

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container.

## **Section 7 - HANDLING and STORAGE**

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

## **Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 288-88-0: Personal Protective Equipment Eyes: Not available.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Flakes

Color: white

Odor: Not available.

pH: Not available.

Vapor Pressure: Not available.  
Viscosity: Not available.  
Boiling Point: 260 deg C @ 760.00m  
Freezing/Melting Point: 119 - 121 deg C  
Autoignition Temperature: 490 deg C ( 914.00 deg F)  
Flash Point: 430 deg C ( 806.00 deg F)  
Explosion Limits, lower: Not available.  
Explosion Limits, upper: Not available.  
Decomposition Temperature: 430 deg C  
Solubility in water: 1250 g/l (20 c)  
Specific Gravity/Density:  
Molecular Formula: C<sub>2</sub>H<sub>3</sub>N<sub>3</sub>  
Molecular Weight: 69.06

### **Section 10 - STABILITY AND REACTIVITY**

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, strong oxidants.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong acids.

Hazardous Decomposition Products:

Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide, ammonia.

Hazardous Polymerization: Has not been reported.

### **Section 11 - TOXICOLOGICAL INFORMATION**

RTECS#:

CAS# 288-88-0: XZ3806000 LD50/LC50:

CAS# 288-88-0: Draize test, rabbit, eye: 12%; Draize test, rabbit, skin: 25%; Oral, mouse: LD50 = 1350 mg/kg; Oral, rat: LD50 = 1750 mg/kg.

Carcinogenicity:

1,2,4-1H-TRIAZOLE - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

### **Section 12 - ECOLOGICAL INFORMATION**

Ecotoxicity:

invertebrate toxicity : EC50 (30 min) Photobacterium Phosphoreum 5200 ppm Microtox test (Kaiser, KLE Water Pollut. Res. J. Can. 1991)

### **Section 13 - DISPOSAL CONSIDERATIONS**

Dispose of in a manner consistent with federal, state, and local regulations.

## **Section 14 - TRANSPORT INFORMATION**

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

## **Section 15 - REGULATORY INFORMATION**

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

R 36 Irritating to eyes.

R 63 Possible risk of harm to the unborn child.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)

CAS# 288-88-0: 2

Canada

CAS# 288-88-0 is listed on Canada's DSL List.

CAS# 288-88-0 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 288-88-0 is listed on the TSCA inventory.

## **SECTION 16 - ADDITIONAL INFORMATION**

N/A