

## SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Product Name: 2,2'-Azobis-2-methylpropionitrile 98%

Product Code: A37050

Supplier: Pfaltz & Bauer, Inc.  
172 E. Aurora Street  
Waterbury, CT 06708 USA

Phone: 203-574-0075

FAX: 203-574-3181

Emergency Phone: INFOTRAC, US: 1-800-535-5053  
INFOTRAC, INTERNATIONAL: +1-352-323-3500

## SECTION 2: HAZARDS IDENTIFICATION

Statement of Hazard: Environmentally hazardous, Irritant, Respiratory irritant, Self-reactive substance, Toxic

Acute Health Hazard: Irritant to eyes, skin, mucous membranes and respiratory system. May be toxic by ingestion, harmful by skin absorption and inhalation.

Chronic Health Hazard: Not Available

HMIS Rating: H: 2      F: 3      P: 3

NFPA Rating: H: 2      F: 3      R: 3

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

GHS Classification in accordance with Regulation (EC) No 1272/2008:

Acute toxicity, dermal (Category 4), H312  
Acute toxicity, inhalation (Category 4), H332  
Acute toxicity, oral (Category 3), H301  
Hazardous to the aquatic environment, chronic toxicity (Category 3), H412  
Self-reactive substances and mixtures and Organic peroxides (Category Types C, D, E, F), H242  
Serious eye damage/eye irritation (Category 2A), H319  
Skin corrosion/irritation (Category 2), H315  
Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3), H335

Pictogram:



Signal Word:

Danger

Hazard Statement(s):

H242 Heating may cause a fire.  
H301 Toxic if swallowed.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
P220 Keep/Store away from clothing/.../combustible materials.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink, or smoke when using this product.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302+P352 IF ON SKIN: wash with plenty of soap and water.  
P332+P313 IF SKIN irritation occurs: Get medical advice/attention.  
P372 Explosion risk in case of fire.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P420 Store away from other materials.

### **SECTION 3: COMPOSITION/INFORMATION on INGREDIENTS**

Chemical Name:

2,2'-Azobis-2-methylpropionitrile 98%

Synonyms:

a,a'-Azobisisobutyronitrile; AIBN; Azobisisobutyronitrile; VAZO® catalyst 64 free radical source; Free radical initiator

CAS Number:

78-67-1

MDL Number:

MFCD00013808

EINECS Number:

201-132-3

Beilstein Registry Number: 1708400

Molecular Formula: (CH<sub>3</sub>)<sub>2</sub>C(CN)N<sub>2</sub>C(CH<sub>3</sub>)<sub>2</sub>CN

Molecular Weight: 164.21

Content: As specified in product name.

#### **SECTION 4: FIRST AID MEASURES**

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.

Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention.

Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

#### **SECTION 5: FIRE FIGHTING MEASURES**

Flash Point (°C): 4

Explosion Limits: Not Available

Auto Ignition Temperature (°C): 64

Extinguishing Media: Carbon dioxide, dry chemical powder, alcohol-resistant foam, or water spray

Protective Equipment: Wear self-contained respirator and fully protective impervious suit.

Specific Hazards: May emit hazardous fumes under fire conditions.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal Protection: Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Remove from ignition sources if safe to do so. Follow emergency response plan and contact proper authorities if needed. Keep unprotected persons away.

Environmental Protection: Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

## SECTION 7: HANDLING and STORAGE

Handling and Storage: Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.  
Store in a tightly closed container in a dry, well-ventilated place. Store under inert gas. Store under nitrogen.

Sensitivities: Air, Light

Storage Temperature (°C): 2 to 8

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use product in a well ventilated area or under a fume hood. Use proper lab equipment while handling this product. Keep away from incompatible materials for possible risk of hazardous reaction.

Eye Protection: Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash station in your vicinity.

Skin Protection: Wear impervious gloves and protective clothing.

Respiratory Protection: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

<u>Exposure Limits:</u>	<u>Country</u>	<u>Source</u>	<u>Type</u>	<u>Value</u>
	USA	ACGIH	TWA	Not Available
	USA	OSHA	STEL	Not Available
	USA	OSHA	PEL	Not Available

## SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

Appearance: White crystalline powder

Odor: Not Available

Odor Threshold: Not Available

Flash Point (°C): 4

Auto Ignition Temperature (°C): 64

UEL % by Volume: Not Available

<u>LEL % by Volume:</u>	Not Available
<u>Melting Point (°C):</u>	102-104
<u>Boiling Point (°C):</u>	Not Available
<u>Evaporation Rate:</u>	Not Available
<u>pH Value:</u>	Not Available
<u>Density (g/cm<sup>3</sup>):</u>	1.1
<u>Refractive Index (n<sup>20D</sup>):</u>	Not Available
<u>Viscosity:</u>	Not Available
<u>Solubility in Water:</u>	Not Available
<u>Solubility in Other:</u>	Not Available
<u>Vapor Pressure (mmHg):</u>	Not Available
<u>Vapor Density (Air=1):</u>	Not Available

## **SECTION 10: STABILITY and REACTIVITY**

<u>Stability:</u>	Stable under normal temperatures and pressures.
<u>Incompatibility:</u>	Aldehydes, Strong oxidizing agents, Alcohols, Alkali metals, Heptane, Contamination, Acetone
<u>Reactivity:</u>	Product may react with incompatible materials to release other hazardous substances.
<u>Conditions to Avoid:</u>	Heat, flame, sparks, other ignition sources.
<u>Hazardous Decomposition Products:</u>	Carbon oxides, Nitrogen oxides

## **SECTION 11: TOXICOLOGICAL INFORMATION**

<u>RTECS Reference:</u>	UG0800000
<u>Target Organs:</u>	Not Available
<u>Toxicity Data:</u>	Oral Rat LD <sub>50</sub> mg/kg: 100.00

Carcinogenicity:

National Toxicology Program (NTP) listed:  
Not Available

International Agency for Research on Cancer (IARC) listed: Not  
Available

Potential Symptoms:

Not Available

## **SECTION 12: ECOLOGICAL INFORMATION**

Toxicity:

Not Available

## **SECTION 13: DISPOSAL CONSIDERATIONS**

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

## **SECTION 14: TRANSPORT INFORMATION**

DOT Shipping Name:

Self-Reactive Solid Type C

DOT UN Number:

UN3224

DOT Hazard Class:

Class 4.1

DOT Packing Group:

No Packing Group

IMDG Shipping Name:

Self-Reactive Solid Type C, Temperature Controlled

IMDG UN Number:

UN3234

IMDG Hazard Class:

Class 4.1

IMDG Packing Group:

No PG

Marine Pollutant:

Yes

IATA Shipping Name:

Not permitted for air transport

#Error

#Error

#Error

## **SECTION 15: REGULATORY INFORMATION**

United States

Toxic Substance Control Act (TSCA) listed: Yes

Superfund Amendments and Reauthorization Act (SARA 302) listed: No

Superfund Amendments and Reauthorization Act (SARA 311/312) listed: No

Superfund Amendments and Reauthorization Act (SARA 313) listed: No

#### European Union

European Inventory of Existing Chemical Substances (EINECS): 201-132-3

GHS Classification in accordance with Regulation (EC) No 1272/2008: Yes

#### Canada

Canadian Domestic Substances List (DSL) listed: Yes

Canadian Non-Domestic Substances List (NDSL) listed: No

## **SECTION 16: OTHER INFORMATION**

Date Prepared: 6/21/2023

The information above is presented in good faith. It is believed to be accurate and represents the best information currently available to us. However, we make no warranty with respect to such information and we assume no liability resulting from its use. The user should consider this information as a supplement to other information that may be available and make independent judgement to ensure proper use to protect the health and safety of employees and the environment. Pfaltz and Bauer shall not be held liable for any damage resulting from handling or from contact with the above product.