



SIGMA-ALDRICH

Material Safety Data Sheet

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Section 1 - Product and Company Information

Product Name: Anti-Matrix Metalloproteinase-2, Developed In rabbit, IgG fraction of antiserum
Product Number: M4065
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 800 325 5052
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Table with 5 columns: Substance Name, CAS #, SARA 313, EC no, Annex I Index Number. Row 1: ANTI-MATRIX METALLOPROTEINASE, DEVELOPED IN RABBIT, AFFINITY ISOLATED ANTIBODY, None, No, Annex I Index Number

Formula
Synonyms

Section 3 - Hazards Identification

Emergency Overview
Caution: Avoid contact and inhalation. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides.
Target organ(s): Kidneys.

HMIS Rating
Health: 1\* Flammability: 0 Reactivity: 1

NFPA Rating
Health: 1 Flammability: 0 Reactivity: 1

\*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

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

Inhalation Exposure
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Dermal Exposure
In case of contact, immediately wash skin with soap and copious amounts of water.

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

Explosion Hazards
Azide reacts with many heavy metals such as lead, copper, mercury, silver, gold to form explosive compounds. Copper and lead azides are more sensitive than nitroglycerine. Azide reacts with metal halides to give a range of metal azide halides, many of which are explosive. Incompatible with chromyl chloride, hydrazine, bromine, carbon disulfide, dimethyl sulfate, dibromonitrotrifluoride.

Autoignition Temp: N/A

Extinguishing Media
Suitable
Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s)
Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up
Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure
Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable
Keep tightly closed. Store at -20°C

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
Government approved respirator.
Hand
Compatible chemical-resistant gloves.
Eye
Chemical safety goggles.
Skin-Specific
Chemical resistant apron.

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**General Hygiene Measures**

Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Section 9 - Physical/Chemical Properties****Appearance****Physical State**

Liquid

**Molecular Weight:** N/A

**pH** 7.4  
**BP/BP Range** N/A  
**MP/MP Range** N/A  
**Freezing Point** N/A  
**Vapor Pressure** N/A  
**Vapor Density** N/A  
**Saturated Vapor Conc.** N/A  
**SG/Density** N/A  
**Bulk Density** N/A  
**Odor Threshold** N/A  
**Volatile%** N/A  
**VOC Content** N/A  
**Water Content** N/A  
**Solvent Content** N/A  
**Evaporation Rate** N/A  
**Viscosity** N/A  
**Partition Coefficient** N/A  
**Decomposition Temp.** N/A  
**Flash Point °F** N/A  
**Flash Point °C** N/A  
**Explosion Limits** N/A

**Flammability** N/A  
**Autoignition Temp** N/A  
**Solubility** N/A

N/A = not available

**Section 10 - Stability and Reactivity****Stability**

Stable

Stable.

**Materials to Avoid**

Dimethyl sulfate is incompatible with sodium azide, Acid chlorides, Halogenated solvents, Avoid contact with metals., Avoid contact with acid., Sodium azide may react with lead and copper plumbing to form highly explosive metal azides..

**Hazardous Decomposition Products****Hazardous Decomposition Products**

Nature of decomposition products not known.

**Hazardous Polymerization**  
**Hazardous Polymerization**  
Will not occur.

**Section 11 - Toxicological Information****Route of Exposure****Skin Contact**

May cause skin irritation.

**Skin Absorption**

May be harmful if absorbed through the skin.

**Eye Contact**

May cause eye irritation.

**Inhalation**

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

**Ingestion**

May be harmful if swallowed.

**Sensitization****Sensitization**

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**Target Organ(s) or System(s)**

Kidneys.

**Signs and Symptoms of Exposure**

Many azides cause a fall in blood pressure and some inhibit enzyme action. Laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect, demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, and hepatic and cerebral effects. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**RTCS Number:** N/A

**Section 12 - Ecological Information**

No data available.

**Section 13 - Disposal Considerations****Appropriate Method of Disposal of Substance or Preparation**

Contact a licensed professional waste disposal service to dispose of this material.  
Observe all federal, state, and local environmental regulations.

**Section 14 - Transport Information****DOT**

**Proper Shipping Name:** None

**Non-Hazardous for Transport:** This substance is considered to be non-hazardous for transport.

**IATA**

**Non-Hazardous for Air Transport:** Non-hazardous for air transport.

**Section 15 - Regulatory Information****EU Additional Classification**

**Safety Statements** S: 23 24/25

Do not breathe spray. Avoid contact with skin and eyes.

**US Classification and Label Text****US Statements**

Caution: Avoid contact and inhalation. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Target organ(s): Kidneys.

**United States Regulatory Information**

**SARA Listed:** No

**Canada Regulatory Information****WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** No

**NDSL:** No

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**Section 16 - Other Information**

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**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. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

