

## SAFETY DATA SHEET

Version 6.3 Revision Date 08/10/2020 Print Date 10/27/2020

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name : 4-Azidobenzoic acid

Product Number : 909491

Brand : Sigma-Aldrich CAS-No. : 6427-66-3

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

## 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.

3050 Spruce Street ST. LOUIS MO 63103

**UNITED STATES** 

Telephone : +1 314 771-5765 Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone #: 800-424-9300 CHEMTREC (USA) +1-703-

527-3887 CHEMTREC (International) 24

Hours/day; 7 Days/week

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

Self-reactive chemicals (Type B), H241 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Specific target organ toxicity - repeated exposure (Category 1), Blood, H372

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

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Heating may cause a fire or explosion.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
Causes damage to organs (Blood) through prolonged or
repeated exposure.
Keep away from heat/ sparks/ open flames/ hot surfaces. No
smoking.
Keep/Store away from clothing/ combustible materials.
Keep only in original container.
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ eye protection/ face protection.
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove person to fresh air and keep comfortable
for breathing. Call a POISON CENTER/ doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue
rinsing.
Get medical advice/ attention if you feel unwell.
If skin irritation occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant
foam to extinguish.
In case of fire: Evacuate area. Fight fire remotely due to the
risk of explosion.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Store away from other materials.
Dispose of contents/ container to an approved waste disposal

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

plant.

## **SECTION 3: Composition/information on ingredients**

# 3.1 Substances

Synonyms : P-Azidobenzoic acid

Benzoic acid, 4-azido-4-Azido-benzoic acid 4-N3-benzoic acid

Formula : C7H5N3O2 Molecular weight : 163.13 g/mol CAS-No. : 6427-66-3 EC-No. : 229-198-9

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Component	Classification	Concentration
4-azidobenzoic acid		
	B; Skin Irrit. 2; Eye Irrit.	<= 100 %
	2A; STOT SE 3; STOT RE	
	1; H241, H315, H319,	
	H335, H372	

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: First aid measures**

## 4.1 Description of first-aid measures

#### General advice

Show this material safety data sheet to the doctor in attendance.

## If inhaled

After inhalation: fresh air. Call in physician.

## In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 4.3 Indication of any immediate medical attention and special treatment needed No data available

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

#### Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx)

Combustible.

Explosive decomposition possible on heating.

Development of hazardous combustion gases or vapours possible in the event of fire.



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## **5.3** Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### 5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

## **6.2 Environmental precautions**

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## 6.4 Reference to other sections

For disposal see section 13.

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep locked up or in an area accessible only to qualified or authorized persons. Tightly closed and away from sources of ignition and heat. Observe national regulations.

Recommended storage temperature 2 - 8 °C

Light sensitive. Heat sensitive. Store under inert gas.

Storage class (TRGS 510): 4.1A: Other explosive hazardous materials

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

## **Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

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## 8.2 Exposure controls

## **Appropriate engineering controls**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

## Personal protective equipment

## Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

## Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

## **Body Protection**

protective clothing

## Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

## **Control of environmental exposure**

Do not let product enter drains.

## **SECTION 9: Physical and chemical properties**

## .1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

Color: white

b) Odorc) Odor Thresholdd) pHNo data availableNo data available

e) Melting point: 180 °C (356 °F)

point/freezing point

f) Initial boiling point No data available

and boiling range

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g) Flash point ()Not applicable h) Evaporation rate No data available Flammability (solid, No data available gas) Upper/lower No data available j) flammability or explosive limits No data available k) Vapor pressure No data available Vapor density

r) Vapor pressure
 l) Vapor density
 m) Relative density
 n) Water solubility
 n) Partition coefficient:
 No data available
 No data available

n-octanol/water

p) Autoignition No data available

temperature

q) Decomposition The product is a self-reactive substance or mixture classified as

temperature type B. Type C

r) Viscosity No data availables) Explosive properties No data availablet) Oxidizing properties No data available

## 9.2 Other safety information

No data available

# **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

#### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

#### 10.3 Possibility of hazardous reactions

No data available

## 10.4 Conditions to avoid

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no information available

## 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products - No data available

In the event of fire: see section 5



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#### **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

## **Acute toxicity**

No data available

Inhalation: No data available Dermal: No data available

No data available

#### Skin corrosion/irritation

No data available

## Serious eye damage/eye irritation

No data available

## Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

## Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

## Reproductive toxicity

No data available

# Specific target organ toxicity - single exposure

May cause respiratory irritation. - Upper respiratory tract

## Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure. - Blood

## **Aspiration hazard**

No data available

## **Additional Information**

RTECS: Not available

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

## **SECTION 12: Ecological information**

## 12.1 Toxicity

No data available

## 12.2 Persistence and degradability

No data available

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## 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and loc No mixing with other waste. Handle uncleaned containers like the product Explosive materials: transport and disposal only in sufficiently desensitised condition! See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## **SECTION 14: Transport information**

## DOT (US)

UN number: 3224 Class: 4.1

Proper shipping name: Self-reactive solid type C (4-azidobenzoic acid)

Reportable Quantity (RQ): Poison Inhalation Hazard: No

## **IMDG**

UN number: 3224 Class: 4.1 EMS-No: F-J, S-G

Proper shipping name: SELF-REACTIVE SOLID TYPE C (4-azidobenzoic acid)

## **IATA**

UN number: 3224 Class: 4.1 (HEAT)

Proper shipping name: Self-reactive solid type C (4-azidobenzoic acid)

Special Provisions: "Keep away from heat" label required.

#### **Further information**

Special competent authority approval required!

## **SECTION 15: Regulatory information**

#### **SARA 302 Components**

This material does not contain any components with a section 302 EHS TPQ.

#### **SARA 313 Components**

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This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

#### **SECTION 16: Other information**

#### **Further information**

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 Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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