

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Revision date: 30/03/2019

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

1.1 Product identifiers

Product name	Sulfamic acid
Product Number	PSR39730
Brand	PureSynth research chemicals
CAS No.	5329-14-6

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

Identified uses : Laboratory Chemicals.

1.3 Details of the supplier of the safety data sheet

Company	PureSynth Research Chemicals GmbH.
	64683 Einhausen Marie-Curie-Straße. 3, Germany

1.4 Emergency telephone number

Worldwide Helpline No.: 1800-8908-260

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation, (Category 2)	H315: Causes skin irritation.
Eye irritation, (Category 2)	H319: Causes serious eye irritation
Long-term (chronic) aquatic hazard, (Category 3)	H412: Harmful to aquatic life with long lasting effects.

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Warning

Hazard statement(s)

H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.
H319	Causes serious eye irritation.

Precautionary statement(s)

P264	Wash skin thoroughly after handling.
P280	Keep container tightly closed.

P273	Avoid release to the environment
P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

- 2.3 **Other hazards:** This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

SECTION 3: Composition / information on ingredients

3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
Amidosulfonic acid	H ₃ NO ₃ S	5329-14-6
Component	Classification	Concentration
Sulphamic acid	Skin Irrit. 2; Eye Irrit. 2; Aquatic Chronic 3; H315, H319, H412	<= 100 %

SECTION 4: First aid measures

Description of first aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician
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
Indication of any immediate medical attention and special treatment needed	No data available

SECTION 5: Fire fighting measures

Extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Nitrogen oxides (NO _x) Sulfur oxides Not combustible.

Advice for fire-fighters	Ambient fire may liberate hazardous vapours. Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Further information	Remove container from danger zone and cool with water. 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

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8
Environmental precautions	Do not let product enter drains.
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 carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area
Reference to other sections	For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling	For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Tightly closed. Dry. Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials
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

Control parameters	Ingredients with workplace control parameters
Exposure controls	Personal protective equipment
Appropriate engineering controls	
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). Tightly fitting safety goggles Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Skin protection	

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

protective clothing.

Respiratory protection

Recommended Filter type: Filter A-(P3) The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

Appearance	Form: crystalline
Odour	Colour: white
pH - Value	odorless
Density	1.5 at 10 g/l at 20 °C
Boiling Point	2.151 g/cm ³ at 25 °C
Melting Point	No data available
Solubility in water	215 - 225 °C
Flash point	181.4 g/l at 20 °C -
Vapour pressure	No data available
Auto -ignition temperature	0.008 hPa at 20 °C
Vapour density	0.025 hPa at 100 °C
Flammability (solid, gas)	> 400 °C - Relative self-ignition temperature for solids
Evaporation rate	No data available
Partition coefficient: n- octanol / water	The product is not flammable. - Flammability (solids)
Viscosity	No data available
Explosive properties	No data available
Upper / lower flammability or explosive limits	No data available
Oxidizing properties	No data available

Other safety information: Dissociation constant -0.99 at 25 °C

SECTION 10: Stability and reactivity

SECTION 11: Toxicological information

Reactivity	No data available LD50 Oral - Rat - female - 2.140 mg/kg
Acute toxicity	The product is chemically stable under standard ambient conditions Inhalation: No data available
Chemical stability	(room temperature) LD50 Dermal - Rat - male and female - > 2.000 mg/kg
Skin corrosion/irritation	Risk of explosion with: Chlorine Result: Severe skin irritation - 24 h
Serious eye damage/eye irritation	Exothermic reaction with: Eyes - rabbit Result: Severe irritations
Respiratory or skin sensitization	halogens alkalines Local lymph node assay (LLNA) - Mouse Result: negative
Possibility of hazardous reactions	Oxidizing agents No data available nitrates Test Type: Ames test nitrites Test system: Escherichia coli/Salmonella typhimurium Nitric acid Metabolic activation: with and without metabolic activation Metals Result: negative Water Test Type: In vitro mammalian cell gene mutation test Strong bases Test system: Chinese hamster ovary cells No data available Metabolic activation: with and without metabolic activation Metals Result: negative
Condition to avoid	In the event of fire, see section 5
Incompatible materials	Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Result: negative
Carcinogenicity	Test Type: Mutagenicity (mammal cell test): micronucleus. Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Result: negative
Hazardous decomposition products	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

Toxicity	
Toxicity to fish	static test LC50 - Pimephales promelas (fathead minnow) – 70.3 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) – 71.6 mg/l - 48 h
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 48 mg/l - 72 h
Toxicity to bacteria	static test EC50 - activated sludge - > 200 mg/l - 3 h EC10 - Pseudomonas putida - >= 1.000 mg/l - 16 h
Persistence and degradability	Not readily biodegradable.
Biodegradability	Not readily biodegradable.
Bio accumulative potential	No data available
Mobility in soil	No data available

Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at Levels of 0.1% or higher.
Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	No data available

SECTION 13: Disposal considerations

Waste treatment methods	Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleansed containers like the product itself.
Products	
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	2967	SULPHAMIC ACID	8	III	No
IMDG	2967	SULPHAMIC ACID	8	III	No
IATA	2967	Sulphamic acid	8	III	No

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

The information in this SDS 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. The user must be determined suitability of this information for his application.