

Revision date: 09-03-2014

# SAFETY DATA SHEET

## 1. Identification

Product identifier: SULFAMIC ACID

Other means of identification Product No.: V145, 1931, V147

Recommended use and restriction on use

Recommended use: Not available. Restrictions on use: Not known.

#### Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name: Avantor Performance Materials, Inc. Address: 3477 Corporate Parkway, Suite 200

Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

Fax:

Contact Person: Environmental Health & Safety e-mail: info@avantormaterials.com

**Emergency telephone number:** 

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

# 2. Hazard(s) identification

#### Hazard classification

#### **Health hazards**

Skin corrosion/irritation Category 1A
Serious eye damage/eye irritation Category 1

#### **Environmental hazards**

Acute hazards to the aquatic Category 3

environment

Chronic hazards to the aquatic Category 3

environment

## Label elements

### Hazard symbol:



Signal word: Danger

**Hazard statement:** Causes severe skin burns and eye damage.

Harmful to aquatic life with long lasting effects.

#### **Precautionary statement**



Revision date: 09-03-2014

**Prevention:** Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly

after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or

hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for

several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Storage: Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

#### 3. Composition/information on ingredients

#### **Substances**

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
SULFAMIC ACID		5329-14-6	90 - 100%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

Ingestion: Rinse mouth thoroughly. Do NOT induce vomiting. Call a POISON

CENTER or doctor/physician if you feel unwell.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Skin contact:** Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

**Eye contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

### Most important symptoms/effects, acute and delayed

**Symptoms:** Causes severe skin and eye burns. Causes digestive tract burns.

## Indication of immediate medical attention and special treatment needed

**Treat symptomatically.** Symptoms may be delayed.

#### 5. Fire-fighting measures

**General fire hazards:** In case of fire and/or explosion do not breathe fumes.



Revision date: 09-03-2014

#### Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

None known.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

## 6. Accidental release measures

Personal precautions. protective equipment and emergency procedures:

Keep unauthorized personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. See Section 8 of the MSDS

for Personal Protective Equipment.

Methods and material for containment and cleaning

up:

Avoid dust formation. Sweep up and place in a clearly labeled container for

chemical waste. Clean surface thoroughly to remove residual

contamination.

**Notification Procedures:** Prevent entry into waterways, sewer, basements or confined areas. Stop

leak if you can do so without risk. Inform authorities if large amounts are

involved.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Avoid discharge into

drains, water courses or onto the ground.

# 7. Handling and storage

Precautions for safe handling:

Use personal protective equipment as required. Do not get in eyes, on skin, on clothing. Avoid inhalation of dust. Wash thoroughly after handling.

Conditions for safe storage,

including any incompatibilities: Keep container tightly closed. Store in a cool and well-ventilated place.

Store in a dry place. Store away from incompatible materials.

#### 8. Exposure controls/personal protection

#### **Control parameters**

**Occupational exposure limits** 

None of the components have assigned exposure limits.

Appropriate engineering

controls

No data available.



Revision date: 09-03-2014

#### Individual protection measures, such as personal protective equipment

**General information:** Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the

immediate work area.

**Eye/face protection:** Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection: Chemical resistant gloves

Other: Wear suitable protective clothing.

**Respiratory protection:** In case of inadequate ventilation use suitable respirator.

**Hygiene measures:** Always observe good personal hygiene measures, such as washing after

handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Provide eyewash station and safety shower.

## 9. Physical and chemical properties

#### **Appearance**

Physical state: Solid

Form: Crystals or powder.

Color: Off-white Odor: Odorless

Odor threshold: No data available.

**pH:** 1.18 (25 °C) (1% solution)

Melting point/freezing point: 205 °C

Initial boiling point and boiling range:No data available.Flash Point:No data available.Evaporation rate:No data available.Flammability (solid, gas):No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

No data available.

No data available.

Vapor pressure:

No data available.

Vapor density: 3.3 AIR=1
Relative density: 2.1 (20 °C)

Solubility(ies)

Solubility in water: Soluble

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

No data available.

No data available.

No data available.

Viscosity:

No data available.

Other information

Molecular weight: 97.09 g/mol (H3NO3S)



Revision date: 09-03-2014

#### 10. Stability and reactivity

**Reactivity:** Contact with water results in slow hydrolysis which liberates toxic and/or

flammable gases.

**Chemical stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

**Conditions to avoid:** Contact with incompatible materials.

**Incompatible materials:** Strong oxidizing agents. Nitric acid. Chlorine.

**Hazardous decomposition** 

products:

Thermal decomposition may produce oxides of carbon and nitrogen.

Oxides of sulfur. ammonia

## 11. Toxicological information

#### Information on likely routes of exposure

**Ingestion:** May cause burns of the gastrointestinal tract if swallowed.

**Inhalation:** Irritating to respiratory system.

**Skin contact:** Causes skin burns.

**Eye contact:** Causes serious eye damage.

#### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

Oral

**Product:** No data available.

**Dermal** 

**Product:** No data available.

Inhalation

**Product:** No data available.

Repeated dose toxicity

**Product:** No data available.

Skin corrosion/irritation

**Product:** Causes skin burns.

#### Serious eye damage/eye irritation

**Product:** Causes serious eye damage.

### Respiratory or skin sensitization

**Product:** Not a skin sensitizer.

Carcinogenicity

**Product:** This substance has no evidence of carcinogenic properties.

#### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

# **US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified



Revision date: 09-03-2014

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro

**Product:** No mutagenic components identified

In vivo

**Product:** No mutagenic components identified

Reproductive toxicity

**Product:** No components toxic to reproduction

Specific target organ toxicity - single exposure

**Product:** No data available.

Specific target organ toxicity - repeated exposure

**Product:** No data available.

**Aspiration hazard** 

**Product:** Not classified

Other effects: None known.

### 12. Ecological information

#### **Ecotoxicity:**

#### Acute hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

Specified substance(s):

SULFAMIC ACID LC 50 (Fathead minnow (Pimephales promelas), 96 h): 14.2 mg/l Mortality

**Aquatic invertebrates** 

**Product:** No data available.

#### Chronic hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

**Aquatic invertebrates** 

**Product:** No data available.

**Toxicity to Aquatic Plants** 

**Product:** No data available.

#### Persistence and degradability

**Biodegradation** 

**Product:** There are no data on the degradability of this product.

**BOD/COD** ratio

**Product:** No data available.

#### Bioaccumulative potential

**Bioconcentration factor (BCF)** 

**Product:** No data available on bioaccumulation.



Revision date: 09-03-2014

# Partition coefficient n-octanol / water (log Kow) Product: No data available.

**Mobility in soil:** No data available.

Other adverse effects: Harmful to aquatic life with long lasting effects.

#### 13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated packaging: Since emptied containers retain product residue, follow label warnings even

after container is emptied.

## 14. Transport information

DOT

UN number: UN 2967 UN proper shipping name: Sulfamic acid

Transport hazard class(es)

Class(es): 8
Label(s): 8
Packing group: III
Marine Pollutant: No

**IMDG** 

UN number: UN 2967

UN proper shipping name: SULPHAMIC ACID

Transport hazard class(es)

Class(es): 8
Label(s): 8

EmS No.: F-A, S-B

Packing group: III
Marine Pollutant: No

**IATA** 

UN number: UN 2967
Proper Shipping Name: Sulphamic acid

Transport hazard class(es):

Class(es): 8
Label(s): 8

Marine Pollutant: No
Packing group: III

# 15. Regulatory information

# **US federal regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

#### CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.



Revision date: 09-03-2014

## Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories		
X Acute (Immediate) Chro	onic (Delayed) Fire Rea	active Pressure Generating
SARA 302 Extremely hazard None present or none	lous substance present in regulated quantities.	
SARA 304 Emergency release None present or none	se notification present in regulated quantities.	
SARA 311/312 Hazardous cl	hemical	
Chemical identity	Threshold Planning Quantity	
SULFAMIC ACID	500	) lbs
SARA 313 (TRI reporting)		
	present in regulated quantities.	

# Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

## Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

#### **US** state regulations

#### **US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

## US. New Jersey Worker and Community Right-to-Know Act

SULFAMIC ACID Listed

## **US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

#### **US. Pennsylvania RTK - Hazardous Substances**

No ingredient regulated by PA Right-to-Know Law present.

## **US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

## **Inventory Status:**

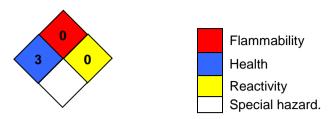
Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

## 16.Other information, including date of preparation or last revision



Revision date: 09-03-2014

#### NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Issue date:** 09-03-2014

**Revision date:** No data available.

Version #: 1.0

Further information: No data available.

**Disclaimer:** THE INFORMATION PRESENTED IN THIS MATERIAL SAFETY DATA

SHEET (MSDS/SDS) WAS PREPARED BY TECHNICAL PERSONNEL BASED ON DATA THAT THEY BELIEVE IN THEIR GOOD FAITH

JUDGMENT IS ACCURATE. HOWEVER, THE INFORMATION PROVIDED

HEREIN IS PROVIDED "AS IS," AND AVANTOR PERFORMANCE

MATERIALS MAKES AND GIVES NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, AND EXPRESSLY DISCLAIMS ALL

WARRANTIES REGARDING SUCH INFORMATION AND THE PRODUCT TO WHICH IT RELATES, WHETHER EXPRESS, IMPLIED, OR

STATUTORY, INCLUDING WITHOUT LIMITATION<(>,<)> WARRANTIES

OF ACCURACY, COMPLETENESS, MERCHANTABILITY, NON-

INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY, STABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE. THIS MSDS/SDS IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PROPERLY TRAINED PERSON USING THIS PRODUCT, AND IS NOT INTENDED TO BE COMPREHENSIVE AS TO THE MANNER AND CONDITIONS OF USE, HANDLING, STORAGE, OR DISPOSAL OF THE PRODUCT. INDIVIDUALS RECEIVING THIS MSDS/SDS MUST ALWAYS EXERCISE THEIR OWN INDEPENDENT JUDGMENT IN

DETERMINING THE APPROPRIATENESS OF SUCH ISSUES.

ACCORDINGLY, AVANTOR PERFORMANCE MATERIALS ASSUMES NO LIABILITY WHATSOEVER FOR THE USE OF OR RELIANCE UPON THIS INFORMATION. NO SUGGESTIONS FOR USE ARE INTENDED AS, AND NOTHING HEREIN SHALL BE CONSTRUED AS, A RECOMMENDATION TO INFRINGE ANY EXISTING PATENTS OR TO VIOLATE ANY FEDERAL, STATE, LOCAL, OR FOREIGN LAWS. AVANTOR PERFORMANCE

STATE, LOCAL, OR FOREIGN LAWS. AVANTOR PERFORMANCE MATERIALS REMINDS YOU THAT IT IS YOUR LEGAL DUTY TO MAKE ALL INFORMATION IN THIS MSDS/SDS AVAILABLE TO YOUR

EMPLOYEES.