

Sulfamic Acid, GR

Material Safety Data Sheet

Section 1. Product and Company Identification

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|----------------------------------|---|----------------------------------|---|
| Product Name | Sulfamic Acid, GR | Product Code | SX1140 |
| Manufacturer | EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc. | Effective Date | 3/3/2003 |
| For More Information Call | 856-423-6300 Technical Service Monday-Friday: 8:00 AM - 5:00 PM | In Case of Emergency Call | 800-424-9300 CHEMTREC (USA) 613-996-6666 CANUTEC (Canada) 24 Hours/Day: 7 Days/Week |
| Synonym | Amidosulfonic Acid | | |
| Material Uses | Analytical reagent. | | |
| Chemical Family | Acid. | | |

Section 2. Composition and Information on Ingredients

| Component | CAS # | % by Weight |
|------------------|--------------|--------------------|
| SULFAMIC ACID | 5329-14-6 | 100 |

Section 3. Hazards Identification

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| Physical State and Appearance | Solid. (Crystalline solid.) |
| Emergency Overview | WARNING! CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY TRACT IRRITATION. CAUSES DAMAGE TO THE FOLLOWING ORGANS: SKIN, EYES. HARMFUL TO AQUATIC ORGANISMS. MAY BE HARMFUL TO ENVIRONMENT IF RELEASED IN LARGE AMOUNTS. |
| Routes of Entry | Inhalation. Ingestion. |
| Potential Acute Health Effects | Eyes Hazardous in case of eye contact (corrosive). Causes eye burns. Skin Hazardous in case of skin contact (corrosive). Skin contact produces burns. Inhalation Hazardous in case of inhalation (lung irritant). Ingestion May cause burns to mouth, throat, and stomach. |
| Potential Chronic Health Effects | Carcinogenic Effects This material is not known to cause cancer in animals or humans. |
| Medical Conditions | Repeated exposure of the eyes to a low level of dust can produce eye |

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Aggravated by Overexposure: irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Section 5. Fire Fighting Measures

Flammability of the Product Non-flammable.

Auto-ignition Temperature Not applicable.

Flash Points Not applicable.

Flammable Limits Not applicable.

Products of Combustion Not available.

Fire Hazards in Presence of Various Substances Not applicable.

Explosion Hazards in Presence of Various Substances **Risks of explosion of the product in presence of static discharge:** No.
Risks of explosion of the product in presence of mechanical impact: No.

Fire Fighting Media and Instructions Not applicable.

Protective Clothing (Fire) Not applicable.

Special Remarks on Fire Hazards Not available.

Special Remarks on Explosion Hazards Not available.

Section 6. Accidental Release Measures

Small Spill and Leak Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill and Leak Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into

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sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Spill Kit Information No specific spill kit required for this product.

Section 7. Handling and Storage

Handling Avoid breathing dust. Use only with adequate ventilation. Do not ingest. Do not get in eyes, on skin, or on clothing.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection

Eyes Splash goggles.

Body Synthetic apron.

Respiratory Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hands Gloves.

Feet Not applicable.

Protective Clothing

(Pictograms)

Personal Protection in Case of a Large Spill Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name **Exposure Limits**
SULFAMIC ACID Not available.

Section 9. Physical and Chemical Properties

Odor Not available.

Color White.

Physical State and Appearance Solid. (Crystalline solid.)

Molecular Weight 97.1 g/mole

Molecular Formula H₃-N-O₃-S

pH Not available.

Boiling/Condensation Point Decomposes.

Melting/Freezing Point Decomposes.

Specific Gravity Not available.

Vapor Pressure Not available.

Vapor Density Not available.

Odor Threshold Not available.

Evaporation Rate Not available.

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|-------------------|-------------------|
| LogKow | Not available. |
| Solubility | Soluble in water. |

Section 10. Stability and Reactivity

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| Stability and Reactivity | The product is stable. |
| Conditions of Instability | Not available. |
| Incompatibility with Various Substances | Reactive with reducing agents, metals, acids. |
| Rem/Incompatibility | Not available. |
| Hazardous Decomposition Products | Not available. |
| Hazardous Polymerization | Will not occur. |

Section 11. Toxicological Information

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| RTECS Number: | Sulfamic Acid | WO5950000 |
| Toxicity | Acute oral toxicity (LD50): 1050 mg/kg [Guinea pig]. | |
| Chronic Effects on Humans | Not available. | |
| Acute Effects on Humans | Hazardous in case of eye contact (corrosive). Causes eye burns. Hazardous in case of skin contact (corrosive). Skin contact produces burns. Hazardous in case of inhalation (lung irritant). May cause burns to mouth, throat, and stomach. | |
| Synergetic Products (Toxicologically) | Not available. | |
| Irritancy | Draize Test (Rabbit): Skin: 500mg/24h. Reaction: Severe. Eye: 250 ug/24h severe | |
| Sensitization | Not available. | |
| Carcinogenic Effects | This material is not known to cause cancer in animals or humans. | |
| Toxicity to Reproductive System | Not available. | |
| Teratogenic Effects | Not available. | |
| Mutagenic Effects | Not available. | |

Section 12. Ecological Information

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| Ecotoxicity | Not available. |
| BOD5 and COD | Not available. |
| Toxicity of the Products of Biodegradation | The product itself and its products of degradation are not toxic. |

Section 13. Disposal Considerations

Not available.

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EPA Waste Number Treatment

Material does not have an EPA Waste Number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, state, and Federal Regulations.

Section 14. Transport Information

DOT Classification Proper Shipping Name: SULFAMIC ACID

Hazard Class: 8
UN number: UN2967
Packing Group: III
RQ: Not applicable.

TDG Classification Not available.

IMO/IMDG Classification Proper Shipping Name: SULPHAMIC ACID

Hazard Class: 8
UN number: UN2967
Packing Group: III
RQ: Not applicable.

ICAO/IATA Classification Not available.

Section 15. Regulatory Information

U.S. Federal Regulations TSCA 8(b) inventory: SULFAMIC ACID

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: SULFAMIC ACID

SARA 311/312 MSDS distribution – chemical inventory – hazard identification: SULFAMIC ACID: Immediate (Acute) Health Hazard

SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada) CLASS E: Corrosive solid.

CEPA DSL: SULFAMIC ACID

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

International

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Regulations

EINECS SULFAMIC ACID 226–218–8
DSCL (EEC) R36/38– Irritating to eyes and skin.
R52/53– Harmful to aquatic organisms, may cause long–term adverse effects in the aquatic environment.

International Lists Australia (NICNAS): SULFAMIC ACID

Japan (MITI): SULFAMIC ACID

Korea (TCCL): SULFAMIC ACID

Philippines (RA6969): SULFAMIC ACID

China: No products were found.

State Regulations New Jersey: SULFAMIC ACID

California prop. 65: No products were found.

Section 16. Other Information

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| National Fire Protection Association (U.S.A.) | 1 | Fire Hazard |
| | 30 | Health |
| | | Reactivity |
| | | Specific Hazard |

Changed Since Last Revision +

Notice to Reader

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