MATERIAL SAFETY DATA SHEET (MSDS)

Section 1. Chemical Identification

Chemical Name : Sulfamic Acid  
Formula : NH₂SO₃H  
CAS No : 5329-14-16  
Chemical Family : Inorganic Acids

Section 2. Ingredients

- Sulfamic Acid  
  Percentage : < 100 wt%  
  CAS No : 5329-14-6  
  Threshold Limit Values (TLV) : Not Established  
  Hazard : May cause eye burns, skin irritation, moderately toxic

- Other Components  
  Percentage : < 1 wt%  
  CAS No : Not Available  
  Threshold Limit Values (TLV) : Not Established  
  Hazard : Not considered to present a carcinogen hazard

Section 3. Physical Data

State : Solid  
Appearance : White crystalline powder  
Odor : None  
Boiling Point : Not Available  
Melting Point : 205°C  
Specific Gravity : 2.126  
Vapor Pressure : Not Applicable  
Vapor Density (Air=1) : Not Available  
Evaporation Rate : Not Available  
Metal Corrosivity (Aluminum) : 0.212 inch/year  
Metal Corrosivity (Steel) : ~0.814 inch/year  
Stability : See condition to avoid  
Storage Precautions : Store tightly closed in a dry place

Section 4. Fire, Explosion Hazard and Reactivity Data

Flash Point : Not Applicable
Method: Not Available
Flammability Limits: Lower: Not Available, Upper: Not Available
Susceptibility to Spontaneous Heating: None
Shock Sensitivity: None
Autoignition: Not Determined
Extinguishing Media: Water or Dry Chemical
Fire/Explosion Hazards: Reacts violently with chlorine, fuming nitric acid, metal nitrates, metal nitrites
Hazardous Decomposition Products: May emit toxic fumes of sulfur oxides, nitrogen oxides, ammonia in fire
Oxidizer: No
Conditions to Avoid: Contract with chlorine or fuming nitric acid, metal nitrates, metal nitrites, oxidizers, bases, extreme heat of flame, excess moisture

Section 5. Health Hazard Data

This Product May be: Corrosive to eyes, skin and respiratory tract
Acute Toxicity: Oral Rat LD50=3160 mg/kg it is moderately toxic
Routes of Exposure: Ingestion, inhalation
Target Organs: Not Determined
Chronic Toxicity: Not Determined
Routes of Exposure: Not Determined
Cancer Information: Not Applicable
Overexposure: Cause eye burns, may cause irritation of skin, respiratory tract, mouth, esophagus and gastrointestinal tract
Medical conditions Aggravated by Exposures: Pre-existing eye, skin, and respiratory tract conditions

Section 6. Precautionary Measures

- Avoid contact with eyes, skin and clothing
- Do not breathe dust
- Wash thoroughly after handling
- Keep away from heat, sparks and open flame
- Protective Equipment: Adequate ventilation, lab grade goggles, rubber gloves, lab coat

Section 7. First Aid

Eye skin contract: Immediately flush eyes and skin with water for 15 minutes. Removed contaminated clothing. Call Physician
Ingestion: Do not induce vomiting. Give 1-2 glasses of water. Call physician immediately. Never give anything by mouth to an unconscious person.
Inhalation: Remove to fresh air
Section 8. Spill and Disposal Procedures

Cover contaminated surface with soda ash or sodium bicarbonate. Mix and add water if necessary. Use litmus paper to make sure pH of slurry is neutral or add neutralizer until mixture stops bubbling. Scoop up the slurry and wash the neutral waste down the drain with excess water. Wash the site with soda ash solution.

Section 9. Transportation Data

Proper Shipping Name : Sulfamic Acid, 8, UN2967, PG III
Hazard Class : 8, PG III
Identification Number : UN2967
DOT Emergency Guide # : 154
Reportable Quantity (RQ) : -
International : Sulfamic Acid, 8, UN2967, PG III, IMDG 8229S