



VSC Etching Crystals

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

This SDS Complies With 29 CFR 1910.1200 (The Hazard Communication Standard)

PRODUCT NAME: VSC Etching Crystals
IDENTIFICATION NUMBER: VPC-1578
PRODUCT FORM: SOLID
SUPPLIER/MANUFACTURER: VANBERG SPECIALIZED COATINGS
10705 COTTONWOOD ST
LENEXA, KS 66215-2032

EMERGENCY REPOSE: 1-800-255-3924
PREPARER: VSC
PHONE: 913-599-5939
PREPARE DATE: AUGUST 27, 15

SECTION 2 – HAZARDS IDENTIFICATION

Classification

Skin irritation (Category 2),
Eye irritation (Category 2A)
Acute aquatic toxicity (Category 3)
Chronic aquatic toxicity (Category 3)

Pictogram



Signal Word

Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation
Harmful to aquatic life with long lasting effects

Precautionary Statements – Prevention

Wash skin thoroughly after handling
Avoid release to the environment
Wear protective gloves/ eye protection/ face protection

Precautionary Statements – Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation occurs.
IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.
IF SWALLOWED: Call a doctor/physician if you feel unwell. Rinse mouth.
Take off contaminated clothing and wash before reuse.

Precautionary Statements -- Disposal

Dispose of contents/container to an approved waste treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS #	WT/WT %
Sulfamic Acid	5329-14-6	90-100

Any concentration shown as a range is to protect confidentiality or is due to process variation.

SECTION 4 – FIRST AID MEASURES

First Aid Measures

Inhalation

Remove to fresh air. If breathing stops, provide artificial respiration. If symptoms persist, call a physician.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.

Ingestion

Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact

Remove contaminated clothing, wash with plenty of soap and water. If skin irritation persists, call a physician.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms

May cause eye irritation with reddening and watering. May cause skin irritation.

Indication of any Immediate Medical Attention and Special Treatment Needed

No data available.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

Nitrogen oxides, sulphur oxides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Use personal protective equipment as required. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and Material for Containment and Cleaning Up

Pick up and arrange disposal without creating dust.

Keep in suitable, closed containers for disposal.

SECTION 7 – HANDLING & STORAGE

Precautions for Safe Handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Avoid dust formation. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Ensure adequate ventilation where dust is formed.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	CAS #	ACGIH TLV	OSHA PEL	NOISH
Sulfamic Acid	5329-14-6	No limits established	No limits established	No limits established

Appropriate Engineering Controls

Engineering Controls

Provide adequate ventilation for dust control.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection

Wear NIOSH approved safety goggles or safety glasses with side shields.

Skin and Body Protection

Wear suitable protective clothing.

Respiratory Protection

Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Solid
Color	White
Property	Values
pH	1.5 at 10 g/l at 20 °C (68 °F)
Melting Point/Freezing Point	215-225 °C (419-437 °F)
Boiling Point/Boiling Range	No data available
Flash Point	No data available
Evaporation Rate	No data available
Flammability (Solid,Gas)	No data available
Upper Flammable Limits	No data available
Lower Flammable Limits	No data available
Vapor Pressure	0.008 hPa (0.006 mmHg) at 20 °C (68 °F)
Vapor Density	No data available
Relative Gravity	2.151 g/cm ³ at 25 °C (77 °F)
Water Solubility	213 g/l at 20 °C (68 °F) 470g/l at 80 °C (176 °F)
Solubility in Other Solvents	No data available
Partition Coefficient	No data available
Autoignition Temperature	No data available
Decomposition Temperature	209 °C (408 °F)
Kinematic Viscosity	No data available
Dynamic Viscosity	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available
Odor	No data available
Odor Threshold	No data available

SECTION 10 – STABILITY & REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

No data available

Conditions to Avoid

No data available

Incompatible Materials

Strong oxidizing agents, Strong bases.

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation

Avoid breathing Dust.

Eye Contact

Causes serious eye irritation

Skin Contact

Causes skin irritation.

Ingestion

Harmful if swallowed.

This product as a whole has not been tested for acute toxicity; the following is based on component data:

Chemical Name	CAS #	Oral LD50	Dermal LD50	Inhalation LC50
Sulfamic Acid	5329-14-6	≈3,160 mg/kg (Rat)	No data available	No data available

Chemical Name	Sulfamic Acid
Skin corrosion/irritation	Moderate skin irritation (rabbit)
Serious eye damage/irritation	Moderate eye irritation (rabbit)
Respiratory or skin sensitization	No data available
Mutagenicity	No data available
Carcinogenicity	Not classifiable
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

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Not determined

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity

There is no data available for this product as a whole.

Chemical Name	CAS #	Algae/aquatic plants	Fish	Aquatic invertebrates
Sulfamic Acid	5329-14-6	No data available	static test LC50 - Pimephales promelas (fathead minnow) - 70.3 mg/l - 96 h	No data available

Persistence and Degradability

Not readily biodegradable

Bioaccumulation

No data available.

Mobility

No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of material in accordance with all Federal, State and local regulations. Local regulations may be more stringent than Federal or State. Avoid discharge to sewers or waterways.

SECTION 14 – TRANSPORTATION INFORMATION

DOT Proper Shipping Description:

Bulk and Non-Bulk

UN2967, Sulfamic acid, 8, PGIII

SECTION 15 – REGULATORY INFORMATION

SARA Title III Section 311/312 (40CFR370)

Acute health hazard

SARA Title III Section 313 (40CFR372)

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.

RCRA Status (40CFR261.33)

No reportable components.

TSCA Inventory Status

Reported/included

OSHA/NTP/IARC Carcinogen Status

Not listed

Canadian DSL Status

Reported/included

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sulfamic Acid 5329-14-6	X	No components	X

SECTION 16 – OTHER INFORMATION

HMIS ratings:

Health	2
Flammability	0
Reactivity	0

Indication of changes: Revision -1
Date Sheet Prepared: 08/04/2015
Other information: Author - EHS Administrator

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

END OF SDS