



## VAPCO PRODUCTS, INC.

### Safety Data Sheet Dry Acid Scale Remover

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#### SECTION 1: Identification

##### GHS Product identifier

Product name	Dry Acid Scale Remover
Product number	DSR-10, DSR-50
Brand	Vapco

##### Recommended use of the chemical and restrictions on use

Activated Dry Powder Acid

##### Supplier's details

Name	Vapco Products, Inc.
Address	401 Marshall Road Valley Park, Missouri 63088 United States
Telephone	(636) 923-2121
Fax	(636) 923-3002
email	info@VapcoProducts.com

##### Emergency phone number

(800) 255-3924

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#### SECTION 2: Hazard identification

##### Classification of the substance or mixture

##### GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Eye damage/irritation, Cat. 1
- Corrosive to metals, Cat. 1
- Skin corrosion/irritation, Cat. 1C

##### GHS label elements, including precautionary statements

# Safety Data Sheet

## Pictogram



## Signal word

## Warning

### Hazard statement(s)

H290

H314

May be corrosive to metals

Causes severe skin burns and eye damage

### Precautionary statement(s)

P234

P260

P264

P270

P280

P301+P312

P301+P330+P331

P303+P361+P353

P304+P340

P305+P351+P338

P310

P321

P330

P363

P390

P405

P406

P501

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash hands and other exposed areas thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Call a POISON CENTER /doctor if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor if exposed or concerned.

Specific treatment (see First Aid on this label).

Rinse mouth.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material-damage.

Store locked up.

Store in a corrosive resistant container with a resistant inner liner.

Dispose of contents/container to the specifications of local, regional, national, and international regulations.

### Statement regarding ingredients of unknown toxicity

This product contains the following percentage of chemicals of unknown toxicity: 4%.

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## SECTION 3: Composition/information on ingredients

### Mixtures

### Hazardous components

#### 1. Sulfamic acid

Concentration 90 - 100 % (weight)

EC no. 226-218-8

CAS no. 5329-14-6

Index no. 016-026-00-0

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## SECTION 4: First-aid measures

### Description of necessary first-aid measures

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General advice	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
If inhaled	First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice/attention.
In case of skin contact	Immediately drench affected area with water for at least 15 minutes. Remove contaminated clothing immediately. Obtain medical attention if irritation develops or persists.
In case of eye contact	Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
If swallowed	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

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

#### Acute Health Hazards

**Symptoms/Injuries:** Harmful if inhaled. May cause serious eye damage, skin burns, and respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Contact with product escaping the container may cause irritation, including but not limited to dermatitis, defatting of tissue, redness, burning, and severe skin damage. Prolonged or repeated exposure may cause irreversible skin damage including burns.

**Symptoms/Injuries After Eye Contact:** Contact with product escaping the container may cause irritation with redness, stinging, swelling, tearing, blurred vision, and eye damage. Burning may not be immediately painful or visible. Prolonged or repeated exposure may cause irreversible eye damage including corneal damage and blindness.

**Symptoms/Injuries After Inhalation:** Exposure is possible under certain conditions. Prolonged or repeated exposure may cause irreversible respiratory tract damage.

**Symptoms/Injuries After Ingestion:** Exposure may be harmful or fatal. Symptoms may include: severe gastrointestinal irritation (diarrhea, nausea, and vomiting) and burns to the mouth, throat, and digestive tract.

**Medicals Conditions Aggravated by Exposure:** Skin contact may aggravate existing dermatitis or other significant skin conditions. Inhalation may adversely affect existing respiratory conditions.

### Indication of immediate medical attention and special treatment needed, if necessary

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand. Note to physician: The absence of visible signs or symptoms of burns does not reliably exclude the presence of actual tissue damage.

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## SECTION 5: Fire-fighting measures

### Suitable extinguishing media

Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, dry chemical, or sand. Use appropriate media for surrounding fire.

### Specific hazards arising from the chemical

Reactivity: Chemically active metals, acids, nitrogen oxide(s), and sulphur oxides.

### Special protective actions for fire-fighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use dry chemical, foam, or carbon dioxide (CO<sub>2</sub>). Do not breathe fumes from fire or vapors from decomposition. Do NOT fight fire when fire reaches containers. Evacuate area. Fight fire remotely due to the risk of explosion. Shut off all sources of ignition. Use water spray or fog for cooling exposed containers.

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**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. Wear NIOSH-approved Self-Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

**Hazardous Combustion Products:** Oxides of nitrogen and sulphur.

### Further information

Do not allow run-off from fire fighting to enter drain or water courses.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**General Measures:** Do not get in eyes, on skin, or on clothing. Do not breathe vapors, spray, mist, gas. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

#### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Stop leak if safe to do so.

#### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedure:** Eliminate ignition source first, then ventilate the area. Evacuate unnecessary personnel, isolate, and ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### Environmental precautions

Prevent entry into sewers and public waters. Avoid release to the environment.

### Methods and materials for containment and cleaning up

**For Containment:** Ventilate area. Contain any spills with dikes or absorbents to prevent further migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Eliminate all ignition sources. Ventilate area. Stop the ignition source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Take up liquid spill into absorbent material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

**Waste Disposal:** Dispose of in accordance with local, regional, national, and international regulations. Containers may be hazardous when empty. Do not flame cut, braze, or weld. Waste likely considered hazardous under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

### Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

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## SECTION 7: Handling and storage

### Precautions for safe handling

**Additional Hazards When Processed:** Do not pressurize, cut, or weld containers.

**Precautions for Safe Handling:** Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Do not breathe gas, mist, spray, vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

**Other Precautions:** Keep out of reach of children. Follow label instructions. Vapors may collect in low lying area.

### Conditions for safe storage, including any incompatibilities

**Technical Measures:** Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

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**Storage Conditions:** Store in a dry, cool place. Keep only in the original container in a cool, well-ventilated place away from ignition sources. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Keep out of reach of children and do not store near food, drink, or animal food.

**Incompatible Materials:** Strong alkalis.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

**CAS: 5329-14-6 (EC: 226-218-8)**

Sulfamic Acid

ACGIH: 10 mg/m<sup>3</sup> (inhalable), 3 mg/m<sup>3</sup> (respirable) TLV® inhalation; OSHA: 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable) PEL-TWA inhalation

**CAS: 67-63-0**

Isopropanol

ACGIH (USA): 200 ppm, (ST) 400 ppm TLV® inhalation; Cal/OSHA: 400 ppm, (ST) 500 ppm PEL inhalation; NIOSH: 400 ppm, (ST) 500 ppm REL inhalation; OSHA: 400 ppm PEL inhalation; 980 mg/m<sup>3</sup> PEL inhalation

### Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Use only outdoors or in well-ventilated area. Ensure all local, regional, national, and international regulations are observed. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

### Individual protection measures, such as personal protective equipment (PPE)

#### Pictograms



#### Eye/face protection

Chemical safety goggles. Insufficient ventilation: wear respiratory protection. Respiratory protection of the dependent type.

#### Skin protection

Wear protective gloves and clothing.

#### Body protection

Wear suitable protective clothing. Wear protective gloves. Chemical resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

#### Respiratory protection

Use a NIOSH-approved Self-Containing Breathing Apparatus whenever exposure may exceed established Occupational Exposure Limits.

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## SECTION 9: Physical and chemical properties and safety characteristics

### Basic physical and chemical properties

Physical state

Solid

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Appearance	Powder
Color	Off-white
Odor	No distinct odor
Odor threshold	N/D
Melting point/freezing point	N/D
Boiling point or initial boiling point and boiling range	N/D
Flammability	Not considered a flammable solid by OSHA (29 CFR 1910.1200)
Lower and upper explosion limit/flammability limit	N/D
Flash point	N/D
Auto-ignition temperature	N/D
Decomposition temperature	N/D
pH	N/A
Kinematic viscosity	N/D
Solubility	Completely soluble in water
Partition coefficient n-octanol/water (log value)	N/D
Vapor pressure	>18
Evaporation rate	<0.8 (Slow)
Density and/or relative density	N/D
Relative vapor density	1 (Air=1)

### Particle characteristics

Volatile Organic Compounds: 0%

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## SECTION 10: Stability and reactivity

### Reactivity

Chemically active metals and acids.

### Chemical stability

Stable under normal conditions of use.

### Possibility of hazardous reactions

None known.

### Conditions to avoid

Do not mix with strong acids.

### Incompatible materials

Strong alkalis. May be corrosive to metals.

### Hazardous decomposition products

Oxides of nitrogen and sulphur.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

The ATE (oral) of the mixture is: 500 mg/kg bw

Sulfamic Acid

LD50 Oral - Rat - 3,160 mg/kg

LD50 Oral - Mouse - 1,312 mg/kg

## Safety Data Sheet

LC50 - Pimephales promelas (fathead minnow) - 70.3 mg/l - 96 h

### **Skin corrosion/irritation**

Causes severe burns, prolonged contact will destroy tissue.

### **Serious eye damage/irritation**

Causes severe burns, irritation, redness, tearing, pain, and may result in loss of sight.

### **Respiratory or skin sensitization**

May cause irritation (possible severe), chemical burns, upper respiratory damage, and pulmonary edema.

### **Germ cell mutagenicity**

Not classified.

### **Carcinogenicity**

Not classified.

### **Reproductive toxicity**

Not classified.

### **STOT-single exposure**

Causes severe burns.

### **STOT-repeated exposure**

Dermatitis may occur due to long-term irritation.

### **Aspiration hazard**

Not classified.

### **Additional information**

#### **Acute Health Hazards**

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**Medicals Conditions Aggravated by Exposure:** Skin contact may aggravate existing dermatitis or other significant skin conditions. Inhalation may adversely affect existing respiratory conditions.

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## SECTION 12: Ecological information

### **Toxicity**

Sulfamic Acid

LD50 Oral - Rat - 3,160 mg/kg

LD50 Oral - Mouse - 1,312 mg/kg

LC50 - Pimephales promelas (fathead minnow) - 70.3 mg/l - 96 h

### **Persistence and degradability**

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This product is biodegradable.

### **Bioaccumulative potential**

This product is not expected to bioaccumulate.

### **Mobility in soil**

This product is mobile in soil.

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## SECTION 13: Disposal considerations

### **Disposal methods**

#### **Product disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations. Do not pierce or burn, even after use.

#### **Waste treatment**

Waste likely considered hazardous under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

#### **Sewage disposal**

Avoid release into the environment. Keep out of sewers and waterways.

#### **Other disposal recommendations**

Container may remain hazardous when empty. Continue to observe all precautions. Do not puncture or incinerate container.

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## SECTION 14: Transport information

### **DOT (US)**

UN Number: UN2967

Class: 8

Packing Group: III

Proper Shipping Name: Sulfamic acid

### **IMDG**

UN Number: UN2967

Class: 8

Packing Group: III

Proper Shipping Name: Sulfamic acid

### **IATA**

UN Number: UN2967

Class: 8

Packing Group: III

Proper Shipping Name: Sulfamic acid

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## SECTION 15: Regulatory information

### **Safety, health and environmental regulations specific for the product in question**

#### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.



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### Canadian Domestic Substances List (DSL)

Chemical name: Sulfamic acid

CAS: 5329-14-6

### New Jersey Right To Know Components

Common name: SULPHAMIC ACID

CAS number: 5329-14-6

### Pennsylvania Right To Know Components

Common name: SULPHAMIC ACID

CAS number: 5329-14-6

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

### SARA 313 Components

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.

### Toxic Substances Control Act (TSCA) Inventory

All chemicals are listed or exempt.

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## SECTION 16: Other information

N/A = Not applicable; N/D = Not determined

### Further information/disclaimer

To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.

### Preparation information

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Date prepared: 6/20/2022

