

Safety Data Sheet

Issue Date: 11-Jan-2019

Revision Date: 05-Mar-2019

Version 2

1. IDENTIFICATION

Product identifier

Product Name 357

Other means of identification

SDS # APCE-002

UN/ID No UN2922

Recommended use of the chemical and restrictions on use

Recommended Use Heavy Duty Acid Cleaner.

Details of the supplier of the safety data sheet

Distributor

BIG RED SUPPLY
237 Old Gainesboro Hwy
Cookeville, TN 38501
Phone: 931-268-4776

Emergency telephone number

Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid

Physical state Liquid

Odor Astringent

Classification

Acute toxicity - Oral	Category 2
Acute toxicity - Dermal	Category 1
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Signal Word

Danger

Hazard statements

Fatal if swallowed
Fatal in contact with skin
Fatal if inhaled
Causes severe skin burns and eye damage
May be corrosive to metals



Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not get in eyes, on skin, or on clothing
 Use only outdoors or in a well-ventilated area
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear respiratory protection
 Keep only in original container

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor
 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 or doctor
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
 Immediately call a POISON CENTER or doctor
 Wash contaminated clothing before reuse
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Immediately call a POISON CENTER or doctor
 IF SWALLOWED: Immediately call a POISON CENTER or doctor
 Rinse mouth
 Do NOT induce vomiting
 IN CASE OF SPILL: Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed
 Store in corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sulfuric Acid	7664-93-9	10-15
Hydrofluoric acid	7664-39-3	10-15
nonylphenol ethoxylate	9016-45-9	2-4

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice

Provide this SDS to medical personnel for treatment.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate with 500-1000 cc of calcium gluconate 1% in saline

	solution with eyes open. Immediately call a poison center or doctor/physician.
Skin Contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Initiate calcium gluconate at 2.5% gel. Make sure to note time of initiation. Immediately call a poison center or doctor/physician.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
Ingestion	Immediately call a poison center or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms	Fatal if swallowed. Fatal if inhaled. Fatal in contact with skin. Causes severe skin burns and eye damage.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Foam. Water spray (fog).

Unsuitable Extinguishing Media Not determined.**Specific Hazards Arising from the Chemical**

Product is not flammable.

Hazardous combustion products Heat, Fluorine Gas, and Hydrogen Fluoride Fumes. Exposure to fire may liberate carbon dioxide, carbon monoxide, organic acids, and other unidentified thermal decomposition products from this product or its packaging.**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.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions	Use personal protective equipment as required. Isolate area. Keep unprotected persons away. Ventilate affected area.
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Environmental precautions

Environmental precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
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Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Carefully neutralize with lime, caustic soda or other alkaline material, then use a non-combustible material such as vermiculite, sand or earth to soak up the product and place in a container for later disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Wear protective gloves/protective clothing and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Wear respiratory protection. Keep only in original container.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Store in corrosive resistant container with a resistant inner liner.

Incompatible Materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrofluoric acid 7664-39-3	TWA: 0.5 ppm F TWA: 2.5 mg/m ³ F S* Ceiling: 2 ppm F	TWA: 3 ppm F TWA: 2.5 mg/m ³ F (vacated) TWA: 3 ppm F (vacated) TWA: 2.5 mg/m ³ (vacated) STEL: 6 ppm F	IDLH: 30 ppm IDLH: 250 mg/m ³ F Ceiling: 6 ppm 15 min Ceiling: 5 mg/m ³ 15 min TWA: 3 ppm TWA: 2.5 mg/m ³
Sulfuric Acid 7664-93-9	TWA: 0.2 mg/m ³ thoracic particulate matter	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³	IDLH: 15 mg/m ³ TWA: 1 mg/m ³

Appropriate engineering controls

Engineering Controls

Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection

Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection

Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Clear liquid	Odor	Astringent
Color	Clear	Odor Threshold	Not determined
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	0.2-1.0 (full strength)		
	0.3-1.9 (1% solution)		
Melting point / freezing point	-1.1 °C / 30 °F		
Boiling point / boiling range	82.2 °C / 180 °F		
Flash point	None		
Evaporation Rate	<1	(Water = 1)	
Flammability (Solid, Gas)	Liquid -not Applicable		
Flammability Limit in Air			
Upper flammability or explosive limits	Not determined		
Lower flammability or explosive limits	Not determined		
Vapor Pressure	50 mmHg		
Vapor Density	>1	(Air=1)	
Relative Density	1.08	(Water=1)	
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition temperature	Not determined		
Decomposition temperature	Not determined		
Kinematic viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Extreme temperatures.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

Heat, Fluorine Gas, and Hydrogen Fluoride Fumes. Exposure to fire may liberate carbon dioxide, carbon monoxide, organic acids, and other unidentified thermal decomposition products from this product or its packaging.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes severe eye damage.
Skin Contact	Fatal in contact with skin. Causes severe skin burns.
Inhalation	Fatal if inhaled.
Ingestion	Fatal if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrofluoric acid 7664-39-3	-	-	= 0.79 mg/L (Rat) 1 h
Sulfuric Acid 7664-93-9	= 2140 mg/kg (Rat)	-	85 - 103 mg/m ³ (Rat) 1 h
nonylphenol ethoxylate 9016-45-9	= 1310 mg/kg (Rat) = 2590 mg/kg (Rat)	= 1780 µL/kg (Rabbit) = 2 mL/kg (Rabbit)	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity IARC has classified "strong inorganic acid mist containing sulfuric acid" as a Category 1 carcinogen, substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid. Inorganic mist is not generated under normal use of this product.

Chemical name	ACGIH	IARC	NTP	OSHA
Sulfuric Acid 7664-93-9	A2	Group 1	Known	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
NTP (National Toxicology Program)
Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50 33.30 mg/kg
Dermal LD50 27.00 mg/kg
ATEmix (inhalation-dust/mist) 0.17 mg/L

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Hydrofluoric acid 7664-39-3		660: 48 h Leuciscus idus mg/L LC50	270: 48 h Daphnia species mg/L EC50
Sulfuric Acid		500: 96 h Brachydanio rerio mg/L	29: 24 h Daphnia magna mg/L

7664-93-9		LC50 static	EC50
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Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Hydrofluoric acid 7664-39-3	-1.4

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hydrofluoric acid 7664-39-3	U134			U134

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Sulfuric Acid 7664-93-9	Toxic Corrosive

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN2922
Proper Shipping Name Corrosive liquid, toxic, n.o.s. (Hydrofluoric acid, Sulfuric acid)
Hazard class 8
Subsidiary Hazard Class 6.1
Packing Group II

IATA

UN number UN2922
Proper Shipping Name Corrosive liquid, toxic, n.o.s. (Hydrofluoric acid, Sulfuric acid)
Transport hazard class(es) 8
Subsidiary hazard class 6.1
Packing Group II

IMDG

UN number	UN2922
Proper Shipping Name	Corrosive liquid, toxic, n.o.s. (Hydrofluoric acid, Sulfuric acid)
Transport hazard class(es)	8
Subsidiary Hazard Class	6.1
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Hydrofluoric acid	X	X	X	X	X	X	X	X
Sulfuric Acid	X	X	X	X	X	X	X	X
nonylphenol ethoxylate	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrofluoric acid 7664-39-3	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ
Sulfuric Acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Hydrofluoric acid - 7664-39-3	7664-39-3	10-15	1.0
Sulfuric Acid - 7664-93-9	7664-93-9	10-15	1.0
nonylphenol ethoxylate - 9016-45-9	9016-45-9	2-4	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric Acid	1000 lb			X
Hydrofluoric acid	100 lb			X

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Sulfuric Acid - 7664-93-9	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hydrofluoric acid 7664-39-3	X	X	X
Sulfuric Acid 7664-93-9	X	X	X

16. OTHER INFORMATION

NFPA

Health Hazards

3

Flammability

0

Instability

2

Special Hazards

Not determined

HMS

Health Hazards

Not determined

Flammability

Not determined

Physical hazards

Not determined

Personal Protection

Not determined

Issue Date:

11-Jan-2019

Revision Date:

05-Mar-2019

Revision Note:

Updated transport information

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet