SAFETY DATA SHEET

Issuing Date 07-Aug-2013 Revision Date 07-Aug-2019 **Revision Number 1**

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

RUST SOUR Product Name

Other means of identification

Product Code(s) **RSOUR**

UN-Number UN1778

Synonyms RSOUR

Recommended use of the chemical and restrictions on use

Recommended Use Institutional laundry detergent

Uses advised against No information available

Supplier's details

Supplier Address

NOBLE CHEMICAL, INC.

2205 OLD PHILADELPHIA PIKE

LANCASTER, PA 17602

TEL: 1-888-256-6400

Emergency telephone number

Emergency Telephone CHEM-TEL, INC.

Number 24 Hour Emergency Contact 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 1 Subcategory 1B
Serious Eye Damage/Eye Irritation	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word

Danger

- Hazard Statements
 Harmful if swallowed
- Causes severe skin burns and eye damage



Appearance Clear, Green

Physical State Liquid.

Odor No information available

Precautionary Statements

Prevention

- · Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wear protective gloves/protective clothing/eye protection/face protection.

General Advice

• Immediately call a POISON CENTER or doctor/physician.

Eyes

- 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/physician.

Skin

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

Inhalation

• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Ingestion

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- · Do NOT induce vomiting.

Storage

• Store locked up.

Disposa

• Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms RSOUR

Chemical Name	CAS-No	Weight %	Trade secret

Fluorosilicic acid	16961-83-4	15-30	*
Oxalic acid	144-62-7	1-5	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with soap and plenty of water. Remove and wash contaminated

clothing before re-use. Immediate medical attention is required.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an

unconscious person. Immediate medical attention is required.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

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

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

No information available

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None

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 Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin,

eyes and clothing. Stop leak if you can do it without risk. If spilled, take caution, as material

can cause surfaces to become very slippery.

Environmental Precautions

Environmental Precautions Dispose of contents/container to an approved waste disposal plant.

Methods and materials for containment and cleaning up

Methods for Containment Stop leak if you can do it without risk

^{**}Colorant added

Methods for Cleaning Up Contain spill, dilute with water and neutralize as required. Wash away small spills with

plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing

vapors or mists. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using

this product. Do not take internally. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room

temperature. Keep from freezing. Keep container closed when not in use. Keep out of the

reach of children.

Incompatible Products Ferrous metals. Chlorine-based bleaching agents. Alkaline. Do not mix with anything but

water

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Fluorosilicic acid	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F
16961-83-4	_	TWA: 2.5 mg/m³ dust	_
		(vacated) TWA: 2.5 mg/m ³	
Oxalic acid	STEL: 2 mg/m ³	TWA: 1 mg/m ³	IDLH: 500 mg/m ³
144-62-7	TWA: 1 mg/m ³	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³
		(vacated) STEL: 2 mg/m ³	STEL: 2 mg/m ³

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face ProtectionChemical splash goggles.Skin and Body ProtectionRubber gloves. Latex glovesRespiratory ProtectionParticle filtering face piece

Hygiene Measures 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 Green

Odor No information available Odor Threshold No information available

 Property
 Values
 Remarks/ - Method

 pH
 2.0
 (4 % solution)

Melting Point/RangeNo data availableNone knownBoiling Point/Boiling Range> 100 °C /> 212 °FNone knownFlash PointNo data availableNone known

WPS-ENV-021 - RUST REMOVING SOUR

Evaporation rate No data available None known Flammability (solid, gas) No data available None known

Flammability Limits in Air

upper flammability limit
lower flammability limit
No data available
No data available
No data available

Vapor Pressure No data available None known **Vapor Density** No data available None known **Relative Density** No data available None known **Specific Gravity** None known 1.049 **Water Solubility** 100% None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/waterNo data available None known **Autoignition Temperature** No data available None known **Decomposition Temperature** No data available None known **Viscosity** 5 cps None known

Flammable Properties Not flammable

Explosive Properties No data available Oxidizing Properties No data available

Other information

VOC Content (%) No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Incompatible products.

Incompatible materials

Ferrous metals. Chlorine-based bleaching agents. Alkaline. Do not mix with anything but water

Hazardous decomposition products

Hydrofluoric acid.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Avoid breathing vapors or mists. Vapors may irritate throat and respiratory system.

Eye ContactCauses serious eye damage.Skin ContactCauses severe skin burns.IngestionHarmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	90 mL/kg (Rat)	-	-
Fluorosilicic acid	= 125 mg/kg (Rat)	-	= 1.11 mg/L (Rat) 1 h
Oxalic acid	= 7500 mg/kg (Rat)	= 20000 mg/kg (Rat)	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available. **Mutagenic Effects** No information available.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Fluorosilicic acid		Group 3		

Reproductive Toxicity No information available. STOT - single exposure No information available. STOT - repeated exposure No information available. **Aspiration Hazard** No information available.

Numerical measures of toxicity - Product

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

LD50 Oral 462 mg/kg; Acute toxicity estimate **LD50 Dermal** 24299 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Fluorosilicic acid 16961-83-4		LC50 96 h: = 65 mg/L static (Poecilia reticulata) LC50 96		
		h: = 28.7 mg/L static (Pimephales promelas)		
Oxalic acid 144-62-7		LC50 24 h: = 4000 mg/L static (Lepomis macrochirus)		EC50 48 h: 125 - 150 mg/L Static (Daphnia magna)

Persistence and Degradability No information available.

Bioaccumulation No information available.

Chemical Name	Log Pow
Oxalic acid	-0.81

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging Do not re-use empty containers.

Chemical Name	California Hazardous Waste
Fluorosilicic acid	Toxic
	Corrosive
Oxalic acid	Toxic

Tradiosition dota	Corrosive
Oxalic acid	Toxic

14. TRANSPORT INFORMATION

DOT

UN-Number UN1778 Proper shipping name Fluorosilicic acid

Hazard Class Packing Group

Description UN1778, Fluorosilicic acid, 8, II

Emergency Response Guide 154

Number

TDG

UN-Number UN1778 **Proper Shipping Name** Fluorosilicic acid

Hazard Class Packing Group

Description UN1778, Fluorosilicic acid, 8, II

UN-Number UN1778 **Proper Shipping Name** Fluorosilicic acid

Hazard Class Packing Group Ш

Description UN1778, Fluorosilicic acid, 8, II

ICAO

UN-Number UN1778

Proper shipping name Fluorosilicic acid

Hazard Class Packing Group

Description UN1778, Fluorosilicic acid, 8, II

IATA

UN-Number UN1778 Fluorosilicic acid **Proper Shipping Name**

Hazard Class Packing Group Ш **ERG Code** 8L

Description UN1778, Fluorosilicic acid, 8, II

IMDG/IMO

UN-Number UN1778

Proper Shipping Name Fluorosilicic acid

Hazard Class Packing Group Ш EmS No. F-A, S-B

Description UN1778, Fluorosilicic acid, 8, II

UN-Number UN1778

Proper Shipping Name Fluorosilicic acid

Hazard Class Packing Group Ш **Classification Code** C1

Description UN1778, Fluorosilicic acid, 8, II

ADR

UN-Number UN1778

Proper Shipping Name Fluorosilicic acid

Hazard Class 8 **Packing Group** Ш

Classification Code C1
Tunnel Restriction Code (E)

Description UN1778, Fluorosilicic acid, 8, II, (E)

ADR/RID-Labels 8

Proper Shipping Name Fluorosilicic acid

Hazard Class 8
Packing Group || Classification Code C1

Description UN1778, Fluorosilicic acid, 8, II

Limited Quantity 1 L

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies
EINECS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

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 Commercial Chemical Substances/EU List of Notified 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

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

	lients are listed		

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Fluorosilicic acid	X	X	X		Х
Oxalic acid	X	Х	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION				
NFPA	Health Hazard 3	Flammability 0	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 3	Flammability 0	Physical Hazard 0	Personal Protection X

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501 07-Aug-2013

Issuing Date07-Aug-2013Revision Date07-Aug-2019

Revision Note

General Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet