SAFETY DATA SHEET PROSOCO, Inc.



Issue Date 16-Jan-2015

Revision Date 16-Jan-2015

Version 1

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

Product identifier Product Name

Sure Klean® Ferrous Stain Remover

Other means of identification	
Product Code	10060
UN/ID No	UN1760

Recommended use of the chemical and restrictions on useRecommended UseRestricted to professional users.Uses advised againstNo information available

Details of the supplier of the safety data sheet Manufacturer Address PROSOCO, Inc. 3741 Greenway Circle Lawrence, Kansas 66046

Emergency telephone number 8:00 AM – 5:00 PM CST Monday-Friday NON-BUSINESS HOURS (INFOTRAC)

785-865-4200 800-535-5053

2. HAZARDS IDENTIFICATION

Classification

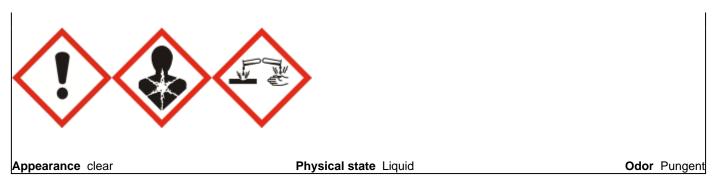
Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Emergency Overview

Danger

Hazard statements Harmful if inhaled Causes severe skin burns and eye damage May cause damage to organs through prolonged or repeated exposure



Precautionary Statements - Prevention

Use only outdoors or in a well-ventilated area Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician 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 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

• May be harmful if swallowed

2.98996% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Water	7732-18-5	40 - 70	*
Phosphoric Acid	7664-38-2	10 - 30	*
Sulfuric Acid	7664-93-9	3 - 7	*
sulfamic acid	5329-14-6	1 - 5	*
Oxalic acid dihydrate	6153-56-6	1 - 5	*
Citric acid	77-92-9	1 - 5	*

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

4. FIRST AID MEASURES

First aid measures	
General advice	Immediate medical attention is required.
Eye contact	Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Skin Contact	Immediate medical attention is required. Wash off immediately with plenty of water while removing contaminated clothing and shoes. If symptoms persist, call a physician.
Inhalation	Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Ingestion	Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Call a physician or poison control center immediately.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.
Most important symptoms and effe	cts, both acute and delayed
Symptoms	The product causes burns of eyes, skin and mucous membranes. Harmful if inhaled. May be harmful if swallowed.
Indication of any immediate medica	al attention and special treatment needed
Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. 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 Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

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 Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

10060 Sure Klean® Ferrous Stain Remover	Revision Date 16-Jan-2015
Environmental precautions	Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.
Methods and material for conta	inment and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up	Dam up. Soak up with inert absorbent material. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.
	7. HANDLING AND STORAGE
Precautions for safe handling	
Advice on safe handling	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.
Conditions for safe storage, inc	luding any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.
Incompatible materials	Incompatible with strong acids and bases. Incompatible with oxidizing agents. Reducing agent. Combustible material. Contact with metals may evolve flammable hydrogen gas.
8	EXPOSURE CONTROL S/PERSONAL PROTECTION

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric Acid	STEL: 3 mg/m ³	TWA: 1 mg/m ³	IDLH: 1000 mg/m ³
7664-38-2	TWA: 1 mg/m ³	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³
		(vacated) STEL: 3 mg/m ³	STEL: 3 mg/m ³
Sulfuric Acid	TWA: 0.2 mg/m ³ thoracic fraction	TWA: 1 mg/m ³	IDLH: 15 mg/m ³
7664-93-9	_	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

 Other Information
 Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

 Appropriate engineering controls
 Showers. Eyewash stations. Ensure adequate ventilation, especially in confined areas. Brush on or apply at the lowest practical pressure. Do not atomize during application. Beware of wind drift. Proper work practices and planning should be utilized to avoid contact with workers, passersby, and non-masonry surfaces. Application equipment, scaffolding,

swing stages and support systems must be constructed of acid resistant materials.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection	Wear protective gloves and protective clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	When using do not eat, drink or smoke. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Regular cleaning of equipment, work area and clothing is recommended. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	clear	Odor	Pungent
Color	amber	Odor threshold	No information available
Property	<u>Values</u>	<u>Remarks • Method</u>	
рН	0.17		
Melting point/freezing point	-16 °C / 3 °F		
Boiling point/boiling range	No information available		
Flash point		Not Applicable	
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limits in Air			
Upper flammability limits	No information available		
Lower flammability limit	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	1.168		
Water solubility	completely soluble		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information 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

Exposure to air or moisture over prolonged periods. Strong bases. Heat. Incompatible materials.

Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents. Reducing agent. Combustible material. Contact with metals may evolve flammable hydrogen gas.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Causes severe skin burns and eye damage	
Inhalation	Avoid breathing vapors or mists. May be harmful if inhaled.	
Eye contact	Avoid contact with eyes. Causes serious eye damage.	
Skin Contact	Avoid contact with skin. Causes severe burns.	
Ingestion	Do not taste or swallow. Harmful if swallowed.	

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Phosphoric Acid 7664-38-2	= 1530 mg/kg (Rat)	= 2730 mg/kg (Rabbit)	> 850 mg/m³(Rat)1 h
Sulfuric Acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m ³ (Rat) 2 h = 347 ppm (Rat) 1 h
sulfamic acid 5329-14-6	= 1450 mg/kg (Rat)	-	-
Citric acid 77-92-9	= 3000 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms

Harmful by inhalation and if swallowed. The product causes burns of eyes, skin and mucous membranes.

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

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic toxicity	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.
Target Organ Effects	Eyes, Respiratory system, Skin, Teeth.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product information

Unknown Acute Toxicity

2.98996% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral)	3895 mg/kg
ATEmix (dermal)	17097 mg/kg mg/l
ATEmix (inhalation-dust/mist)	1 mg/l
ATEmix (inhalation-vapor)	11.5 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Phosphoric Acid 7664-38-2	-	3 - 3.5: 96 h Gambusia affinis mg/L LC50	-	4.6: 12 h Daphnia magna mg/L EC50
Sulfuric Acid 7664-93-9	-	500: 96 h Brachydanio rerio mg/L LC50 static	-	29: 24 h Daphnia magna mg/L EC50
sulfamic acid 5329-14-6	-	14.2: 96 h Pimephales promelas mg/L LC50 static	-	-
Citric acid 77-92-9	-	1516: 96 h Lepomis macrochirus mg/L LC50 static	-	120: 72 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Citric acid	-1.72
77-92-9	

Other adverse effects

No information available

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 Do not reuse container. US EPA Waste Number D002

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOT UN/ID No Proper shipping name Hazard Class Regulated UN1760 Corrosive liquid, n.o.s. (Phosphoric and Sulfuric) 8 Packing Group

15. REGULATORY INFORMATION

International Inventories TSCA DSL/NDSL

Complies Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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US Federal Regulations

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 %
Sulfuric Acid - 7664-93-9	7664-93-9	3 - 7	1.0
SARA 311/312 Hazard Categories			
Acute health hazard	Yes		
Chronic Health Hazard	Yes		
Fire hazard	No		
Sudden release of pressure hazard	No		
Reactive Hazard	No		

CWA (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)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric Acid 7664-38-2	5000 lb	-	-	Х
Sulfuric Acid 7664-93-9	1000 lb	-	-	Х

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

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric Acid 7664-38-2	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Sulfuric Acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric Acid 7664-38-2	Х	X	Х
Sulfuric Acid 7664-93-9	Х	X	Х
sulfamic acid 5329-14-6	Х	-	-

16. OTHER INFORMATION

NFPA_	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties -
HMIS_	Health hazards 3*	Flammability 0	Physical hazards 0	Personal protection X
Prepared By Issue Date Revision Date Revision Note No information available Disclaimer	Regulatory Department 16-Jan-2015 16-Jan-2015			

The information contained on the Material Safety Data Sheet has been compiled from data considered accurate. This data is believed to be reliable, but it must be pointed out that values for certain properties are known to vary from source to source. PROSOCO, Inc. expressly disclaims any warranty express or implied as well as any liability for any injury or loss arising from the use of this information or the materials described. This data is not to be construed as absolutely complete since additional data may be desirable when particular conditions or circumstances exist. It is the responsibility of the user to determine the best precautions necessary for the safe handling and use of this product for his unique application. This data relates only to the specific material designated and is not to be used in combination with any other material. Many federal and state regulations pertain directly or indirectly to the product's end use and disposal of containers and unused material. It is the purchaser's responsibility to familiarize himself with all applicable regulations.

End of Safety Data Sheet