

Health

Reactivity

Personal



# **DESCALING SOLUTION**

# Material & Safety Data Sheet

**SECTION 1: IDENTIFICATION** 

Substance Identification:

Name - Descaling Solution

Form - Mixture

Solute/ Solvent - Citric Acid/ Water

Recommended Use - General cleaning purposes

**Supplier Contact Information:** 

HaleFresh PO BOX 8162,

Rochester MN 55934 info@halefresh.com

507.320.4007

**EMERGENCY** Telephone:

**EMERGENCY Response - CALL 911** 

Over Exposure - CHEMTREC 1-800-222-1222 (24 HR Emergency)

### **SECTION 2: HAZARD IDENTIFICATION**

Signal Word -

**Hazard Pictograms:** 



Warning

Hazard Statements - H315 Causes serious eye irritation

H319 Causes skin irritation

Precautions - P337+P313 If eye irritation persists seek medical attention.

P337+P313 If skin irritation persists seek medical attention.

P362 Take off contaminated clothing and wash before reuse.

P280 Wear Protective goggles and gloves.

P302+P352 IF ON SKIN Wash exposed skin thoroughly after handling.

P305+P351+P338 IF IN EYES, rinse with water for several minutes. Remove contact

lenses if easy to do. Continue rinsing.

### SECTION 3: COMPOSITION INFORMATION/INGREDIENTS

#### Characterization:

Type - Mixture

Name	Product Identifier	%	GHS-US Classification
Water	(CAS No) 7732-18-5	>50%	Not classified
Citric Acid	(CAS No) 77-92-9	<50%	Eye Irritant 2A, H319



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### **SECTION 4: FIRST AID MEASURES**

General Information - Remove affected persons for the area and away from danger.

After Inhalation - Move to a well-ventilated area and supply fresh air. Breath deeply. Seek medical

attention as needed.

After Skin Contact - Immediately wash affected area with soap and water. Monitor for irritation and seek

medical attention as needed.

After Eye Contact - Hold eyes open and rinse for at least 15 minutes. Remove contacts if applicable and

continue rinsing. If irritation persists seek medical attention.

After Swallowing - Rinse out mouth and drink plenty of water. Consult physician before inducing vomiting.

**Most Important Symptom -** Causes serious eye irritation!

### SECTION 5: FIRE & EXPLOSION DATA

Flammability - May be combustible at a high temperature

Auto-Ignition Temp - 1010 °C (1850 °F)

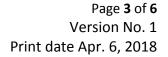
Flash Points - Not Available

Flammable Limit - LOWER: 1.28 kg/m³ (Dust) UPPER: 2.29 kg/m³

Products of Combustion - The products are carbon dioxides (CO & CO2)

Fire Extinguishing Media - SMALL FIRE: Use DRY Chemical Powder, LARGE FIRE: Use Water spray, fog or foam. Do

not use water jet.





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## SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions - Ensure adequate ventilation and wear protective clothing.

Environmental Precautions - Dilute with plenty of water

Small Spill - Using the appropriate protective equipment and tools, clean up the spill and place

in a disposal container according to local guidelines. Finish by cleaning the affected

area with water.

Large Spill - Stop leak if without risk. Do not touch spilled material. Use water spray to reduce

vapors. Prevent continued release by creating a dike or using inert solids such as sand or soil. Eliminate ignition sources. Call for assistance on disposal. Finish by

cleaning the affected area with clean water.

### **SECTION 7: HANDLING & STORAGE**

Precautions for Safe Handling - Ensure good ventilation while using. Wash hands and other exposed areas with mild

soap and water after use. Do not eat, drink, or smoke after before washing hands or

other exposed areas.

Storage Conditions - Store away from heat, sources of ignition and direct sunlight. Store away from

oxidizing agents and strong bases. Store out of reach of children. Store sealed

product in a cool dry place and in the original receptacle.

### SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTIVE EQUIPMENT

Engineering Controls - Emergency eye wash stations should be available in the immediate vicinity of any

potential exposure.

Personal Protection - Safety classes. Gloves. Keep skin covered.



A dust respirator may be used when in an area of poor ventilation, a ventilation system is not in place or if discomfort is experienced.



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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State - Liquid

Appearance - Clear colorless liquid

Color - Colorless

Odor - Slight

pH - ~2.5

Melting Point - No data available

Freezing Point - No data available

Boiling Point - No data available

Flash Point - No data available

Flammability (solid gas) - Non- Flammable

Vapor Pressure - No data available

Solubility - Soluble in Water

Oxidizing Properties - None

### **SECTION 10: STABILITY AND REACTIVITY**

Stability - The product is stable.

Conditions of Instability - Excess heat, incompatible materials.

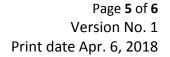
Substances of Incompatibility - Reactive with oxidizing agents, reducing agents, metals, alkalis, strong bases,

bicarbonates, acetates.

Corrosivity - Corrosive in the presence of aluminum, zinc, copper and their alloys. NOT

corrosive in the presence of glass.

Special remarks on Reactivity - Upon decomposition, product will produce carbon dioxide and carbon monoxide.





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### **SECTION 11: TOXICOLOGICAL INFORMATION**

Likely routes of exposure - Skin and eye contact

Acute toxicity - Not classified

Citric Acid, Anhydrous (77-92-9)			
LD50 oral rat	5400 mg/kg		
ATE US (oral)	5400.000 mg/kg body weight		
Water (7732-18-5)			
LD50 oral rat	≥90000		
ATE US (oral)	90000.000 mg/kg body weight		

Skin corrosion/irritation - Not classified

Serious eye damage/irritation - Causes serious eye irritation

Respiratory or skin sensitization - Not classified

Mutagenic Properties - Not classified

Carcinogenic Properties - Not classified

Aspiration Hazard - Not classified

Potential Adverse Human Health Effects & Symptoms - Based on available data, the classification criteria are not

met.

### **SECTION 12: ECOLOGICAL INFORMATION**

Aquatic Toxicity - Not available

Persistence & Degradability - Not available
Bio Cumulative Potential - Not available

Mobility in Soil - Not available

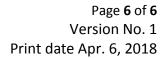
General Notes - Generally, not hazardous for water
Other Information - Avoid release into the environment

### **SECTION 13: DISPOSAL CONSIDERATIONS**

Recommended Disposal - Always consult local/national regulations before disposal. Smaller quantities can

be disposed of with household waste.

Ecology - Avoid release into the environment





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## **SECTION 14: TRANSPORT INFORMATION**

DOT Classification - Not a DOT controlled material (US)

Identification - Not applicable

Special Provisions for Transport - Not applicable

#### **SECTION 15: REGULATORY INFORMATION**

Federal and State TSCA 8(b) inventory: Citric acid

Regulations -

DSCL (ECC) - R36/37/38- Irritating to eyes, respiratory system and skin. S26- In case of contact with

eyes, rinse immediately with plenty of water and seek medical advice. S37/39- Wear

suitable gloves and eye/face protection.

HMIS (USA) - Health Hazard: 2; Fire Hazard: 1 Reactivity: 0

Additional Regulations - No additional information available

#### **SECTION 16: OHTER INFORMATION**

References - Not available Created - 04/06/2018 Last Updated - 04/06/2018

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