Material Name: Haymaker Tankless Water Heater Descaler

* * * Section 1 - Product and Company Identification * * *

MSDS #1671E

Catalog Number: 35230, 35231, 35240

Manufacturer Information

HHC Holdings Inc.
An Oatey Affiliate
4700 West 160th Street
Cleveland, OH 44135

Phone: 216-267-7100

For Emergency First Aid call 1-877-740-5015. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300. Outside the U.S. 1- 703-527-3887.

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Eye Damage/Irritation - Category 2A

GHS LABEL ELEMENTS

Symbol(s)

Signal Word

Warning

Hazard Statements

Causes serious eye irritation.

Precautionary Statements

Prevention

Wash thoroughly after handling.
Wear protective gloves/eye protection/face protection.

Response

If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
7732-18-5	Water	40 - 60
77-92-9	Citric Acid	40 - 60

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Rinse thoroughly with plenty of water, also under the eyelids.

First Aid: Skin

Wash off with warm water and soap.

First Aid: Ingestion

Clean mouth with water and afterwards drink plenty of water.

First Aid: Inhalation

Move to fresh air.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Not flammable.

Hazardous Combustion Products

None known based on information supplied.

Extinguishing Media

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

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Prevent further leakage or spillage if safe to do so.

Materials and Methods for Clean-Up

Neutralize with sodium bicarbonate or soda ash. Take up mechanically and collect in suitable container for disposal. After cleaning, flush away traces with water.

Emergency Measures

Isolate area. Keep unnecessary personnel away.

Personal Precautions and Protective Equipment

Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental Precautions

None.

Prevention of Secondary Hazards

None.

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Handle in accordance with good industrial hygiene and safety practice.

Storage Procedures

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatibilities

Strong oxidizing agents.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

No Exposure guidelines have been established.

Engineering Measures

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: Hands

No special protective equipment required.

Personal Protective Equipment: Eyes

If splashes are likely to occur, wear goggles.

Personal Protective Equipment: Skin and Body

No special protective equipment required.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Colorless to Yellow	**Odor:**	Slight Sugary
Physical State:	Liquid	**pH:**	2.5
Vapor Pressure:	ND	**Vapor Density:**	ND
Boiling Point:	100°C / 212°F	**Melting Point:**	ND
Solubility (H2O):	Soluble	**Specific Gravity:**	1.24
Evaporation Rate:	ND	**VOC:**	0 g/L
Viscosity:	25 cps	**Octanol/H2O Coeff.:**	ND
Flash Point:	NA	**Flash Point Method:**	NA
Upper Flammability Limit (UFL):	NA	**Lower Flammability Limit (LFL):**	NA
Burning Rate:	NA	**Auto Ignition:**	NA

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

None.

Incompatible Products

Strong oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

Component Analysis - LD50/LC50

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Citric Acid (77-92-9)

Oral LD50 Rat >3g/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Causes skin irritation.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Causes serious eye irritation.

Potential Health Effects: Ingestion

No known effect.

Potential Health Effects: Inhalation

No known effect.

Respiratory Organs Sensitization/Skin Sensitization

None expected.

Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects.

Carcinogenicity

A: General Product Information

This product is not reported to have any carcinogenic effects.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ toxicity single exposure effects.

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ toxicity repeat exposure effects.

Aspiration Respiratory Organs Hazard

Not an aspiration hazard.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

This product is not expected to be toxic to aquatic organisms.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Citric Acid (77-92-9)

Test & Species	Conditions
24 Hr EC50 Daphnia magna	>80 mg/L
48 Hr EC50 Daphnia magna	>120 mg/L [Static]

Persistence/Degradability

No information available for the product.

Bioaccumulation

No information available for the product.

Mobility in Soil

No information available for the product.

* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 14 - Transportation Information * * *

DOT Information

Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S (Citric Acid)
Hazard Class: 8
UN/NA Number: UN3265
Packing Group: III
Reportable Qty: N/A

(Exempt from placarding by the US DOT as per 49 CFR 173.154(d) (2)

IMDG Information

Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S (Citric Acid)
Hazard Class: 8
UN/NA Number: UN3265
Packing Group: III
Reportable Qty: N/A

* * * Section 15 - Regulatory Information * * *

Regulatory Information

US Federal Regulations

Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Citric Acid	77-92-9	No	No	No	Yes	Yes	No

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Citric Acid	77-92-9	1 % item 409 (80)

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Water	7732-18-5	Yes	DSL	EINECS
Citric Acid	77-92-9	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Literature References

None

Other Information

NFPA and HMIS:
NFPA Hazard Signal: Health: 0 Flammability: 0 Reactivity: 0
HMIS Hazard Signal: Health: 0 Flammability: 0 Reactivity: 0

Disclaimer:
The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources, and expressly do not make warranties, nor assume any liability for its use.

End of Sheet