



# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

Revision: 06/25/2021

## SECTION 1: Identification

### Product identifier

Product name Hardness Total 4 – Reagent A

Product number R-8022A

### Recommended use and restrictions

Water analysis. To be used in accordance with manufacturer instructions or under the direct guidance of the manufacturer.

### Manufacturer

Taylor Technologies, Inc.  
31 Loveton Circle  
Sparks, MD 21152  
Local: (410) 472-4340 – 8am – 5pm EST  
Toll-free: (800) 837-8548 – 8am – 5pm EST

### Emergency phone number

CHEMTREC, United States 1-800-424-9300 – 24-hour service

CHEMTREC, International +1 703-741-5970 – 24-hour service

## SECTION 2: Hazard(s) Identification

Physical hazards Not applicable

Health hazards Eye damage/irritation Category 2A

Skin corrosion/irritation Category 2

Environmental hazards Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.

### Label elements

Hazard pictograms



Signal word Warning

Hazard statements Causes serious eye irritation. Causes skin irritation.

### Precautionary statements

Prevention Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur.

Response 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. IF ON SKIN: Wash with plenty of water. IF SKIN IRRITATION OCCURS: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Keep tightly capped. Store out of direct sunlight between 36°F–85°F.

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

Hazards not otherwise classified Not applicable

## SECTION 3: Composition/Information on Ingredients

### Mixture

Chemical name	Common name and synonyms	CAS number	% w/w
Water	Dihydrogen oxide	7732-18-5	80-100
Propionic acid	Ethanoic acid	79-09-4	0.1-1
Non-hazardous or below reportable levels	Not applicable	Not applicable	<1

## SECTION 4: First-Aid Measures

### If inhaled

Remove individual to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

**In case of skin contact**

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops.

**In case of eye contact**

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice/attention.

**If swallowed**

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs. If symptoms persist or in all cases of concern, seek medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

Direct skin or eye contact may cause serious irritation. Symptoms may include redness or itching. Tearing of the eyes or blurred vision may occur. Inhalation may cause respiratory irritation, such as coughing. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Refer to section 11 of the SDS for delayed and immediate effects and chronic effects from short- and long-term exposure.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**SECTION 5: Firefighting Measures****Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for the surrounding fire.

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Specific hazards arising from the substance or mixture**

Fire hazard Not flammable

Explosion hazard Not explosive

Reactivity Hazardous reactions will not occur under normal conditions.

Hazardous combustion products Carbon oxides.

**Advice for firefighters**

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.

Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Refer to section 9 of the SDS for flammability properties.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment, and emergency procedures**

Wear appropriate protective equipment and clothing during cleanup. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

**Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

**Methods and material for containment and cleaning up**

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Never return spills to original containers for reuse. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of large spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Reference to other sections**

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

**SECTION 7: Handling and Storage****Precautions for safe handling**

Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

**Conditions for safe storage, including any incompatibilities**

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store away from incompatible materials (refer to section 10 of the SDS).

## SECTION 8: Exposure Controls/Personal Protection

### Occupational exposure limits

#### US ACGIH Threshold Limit Values

Components	Type	Value
Propionic acid (79-09-4)	TWA	10 ppm (30 mg/m <sup>3</sup> )

#### US NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Propionic acid (79-09-4)	TWA	10 ppm (30 mg/m <sup>3</sup> )
Propionic acid (79-09-4)	STEL	15 ppm (45 mg/m <sup>3</sup> )

#### US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Propionic acid (79-09-4)	Not applicable	Not applicable

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure controls

Appropriate engineering controls      Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling this product.

#### Personal protective equipment

Eye/face protection      Wear appropriate safety glasses with side shields (or goggles) if contact is likely to occur.

Skin protection      Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.

Body protection      Wear appropriate protective clothing if contact is likely to occur

Respiratory protection      In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Color	Dark red
Odor	No data available
Odor threshold	No data available
pH	2.8
Evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Initial boiling point (boiling range)	212°F (100°C)
Flash point	Not applicable
Specific gravity	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Upper Flammability Limit	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Miscible

Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

## SECTION 10: Stability and Reactivity

<b>Reactivity</b>	Hazardous reactions will not occur under normal conditions of use, storage, and transport.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions (refer to section 7 of the SDS).
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products known.

## SECTION 11: Toxicological Information

### Information on likely routes of exposure

Inhalation	Avoid inhalation of this product. Use in a well-ventilated area.
Skin contact	Direct contact with skin may cause temporary irritation.
Eye contact	Direct contact with eyes may cause serious irritation. Avoid close eye contact; Use caution to avoid splashes. Wear eye protection.
Ingestion	Avoid accidental ingestion by observing good hygiene practices. Wash hands thoroughly after handling this product.

### Symptoms related to the physical, chemical, and toxicological characteristics

Causes serious eye irritation. Causes skin irritation.  
Refer to section 4 of the SDS for most important symptoms and effects.

### Delayed and immediate effects and chronic effects from short- and long-term exposure

**Acute toxicity** This product is not classified as an acute toxicity hazard.

**Skin corrosion/irritation** Causes skin irritation

**Serious eye damage/eye irritation** Causes serious eye irritation

**Respiratory sensitization** No data available

**Skin sensitization** No data available

**Germ cell mutagenicity** No data available

### Carcinogenicity

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)

Not regulated

#### US National Toxicology Program (NTP) Report on Carcinogens

Not listed

**Reproductive toxicity** No data available

**Specific target organ toxicity (single exposure)** No data available

**Specific target organ toxicity (repeated exposure)** No data available

**Aspiration hazard** No data available

## SECTION 12: Ecological Information

<b>Ecotoxicity</b>	This product is not classified as environmentally hazardous.
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	Large or frequent spills can have a harmful or damaging effect on the environment.

## SECTION 13: Disposal Considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport Information

DOT	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods

## SECTION 15: Regulatory Information

### US federal regulations

#### CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

#### SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

#### SARA 304 Emergency Release Notification

Not regulated

#### SARA 311/312 Hazardous Chemical

Chemical name	CAS number
Propionic acid	79-09-4

#### SARA 313 (TRI reporting)

Not regulated

#### TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

#### Clean Air Act (CAA) Section 112® Accidental Release Prevention (40 CFR 68.130)

Not regulated

#### Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

#### Safe Drinking Water Act (SDWA)

Not regulated

### US state regulations

#### California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

#### Massachusetts Right-to-Know Act

Chemical name	CAS number
Propionic acid	79-09-4

#### New Jersey Worker and Community Right-to-Know Act

Chemical name	CAS number
Propionic acid	79-09-4

#### Pennsylvania Worker and Community Right-to-Know Act

Chemical name	CAS number
Propionic acid	79-09-4

#### Rhode Island Right-to-Know Act

Chemical name	CAS number
Propionic acid	79-09-4

## SECTION 16: Other Information

### NFPA Rating

Health hazard	2
Fire hazard	0
Reactivity	0
Specific	N/A

### Disclaimer

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

License granted to make unlimited paper copies for internal use only. This Safety Data Sheet may not be altered in any way without the expressed knowledge and permission of Taylor Technologies, Inc. The information contained in this sheet is based on lab experience and the most current data available.

### Issue date:

May 2015

### Revision date:

06/25/2021

### Revision information:

This document embodies significant change(s) that may impact classification, safe handling, or health information for the associated product(s). The information contained herein should be reviewed in its entirety before handling material.