

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Hardness Reagent

SECTION 1: Identification

Material name: Hardness Reagent

Product code: AR-1004-60

Recommended use of the product and restriction on use:

Recommended for use as a laboratory reagent only.

Manufacturer or supplier details

Manufacturer:

Aqua Analytics
245 Matheson Blvd East, Units 1 & 2
Mississauga, Ontario Canada L4Z 3C9
(888) 712-4000

Emergency telephone number:

Emergency Phone No.

(613) 996-6666

SECTION 2: Hazard identification

GHS classification:

Skin irritation, category 2.

Eye irritation, category 2A.

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

Causes skin irritation

Causes serious eye irritation

Precautionary statements:

Wash skin thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with soap and water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing.

Specific treatment (see supplemental first aid instructions on this label).

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Hazards not otherwise classified: None

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SECTION 3: Composition/information on ingredients

Identification	Name	Wt. %
CAS number: 7732-18-5	Water	98.53
CAS number: 6381-92-6	EDTA Disodium Salt Dihydrate	1.25
CAS number: 1310-73-2	Sodium hydroxide	0.16
CAS number: 7791-18-6	Magnesium chloride, hexahydrate	0.07

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position.
Maintain an unobstructed airway.
Get medical advice/attention if you feel unwell.

After skin contact:

Wash affected area with soap and water.
Seek medical attention if symptoms develop or persist.

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes.
Remove contact lens(es) if able to do so during rinsing.
Seek medical attention if irritation persists or if concerned.

After ingestion:

Rinse mouth and then drink plenty of water.
Do not induce vomiting.
Get medical advice/attention if you feel unwell.

Most important symptoms and effects, both acute and delayed

Acute symptoms:

No information available.

Delayed symptoms:

No information available.

Immediate medical attention and special treatment:

No information available.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing media:

No information available.

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Specific hazards during fire-fighting:

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

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing.

Refer to Section 8.

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

Additional information:

Heating causes a rise in pressure, risk of bursting and combustion.

Shut off sources of ignition.

Carbon monoxide and carbon dioxide may form upon combustion.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Ensure air handling systems are operational.

Wear protective eye wear, gloves and clothing.

Environmental precautions:

Should not be released into the environment.

Prevent from reaching drains, sewer or waterway.

Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay) , acid binders, universal binders).

Dispose of contents / container in accordance with local regulations.

Reference to other sections:

None

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.

Avoid breathing mist or vapor.

Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

Store away from foodstuffs.

SECTION 8: Exposure controls/personal protection

Components with workplace control parameters:

Component name	Identifier	Permissible concentration
Sodium hydroxide	1310-73-2	OSHA TWA 2.0 mg/m ³
Sodium hydroxide	1310-73-2	ACGIH C 2.0mg/m ³
Sodium hydroxide	1310-73-2	NIOSH C 2.0mg/m ³

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Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

Eye protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

General hygienic measures:

Wash hands before breaks and at the end of work.
Avoid contact with skin, eyes and clothing.
Perform routine housekeeping.
Wash contaminated clothing before reusing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid	Explosion limit lower: Explosion limit upper:	Not available Not available
Odor:	Odorless	Vapor pressure:	Not available
Odor threshold:	Not available	Vapor density:	>1
pH-value:	8 - 10	Relative density:	Approx. 1
Melting/Freezing point:	Approx. 0 °C	Solubilities:	Infinite solubility in water.
Boiling point/range:	Approx. 100°C	Partition coefficient (n-octanol/water):	Not available
Flash point (closed cup):	Not available	Auto/Self-ignition temperature:	Not available
Evaporation rate:	Not available	Decomposition temperature:	Not available
Flammability (solid, gaseous):	Not available	Dynamic viscosity:	Not available
Density:	Not available	Kinematic viscosity:	Not available

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

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Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Exposure routes:

No information available.

Most important symptoms and effects, both acute and delayed

Acute symptoms:

No information available.

Delayed symptoms:

No information available.

Acute toxicity:

Oral:

EDTA Disodium Salt Dihydrate: LD50 Oral - Rat - 3700 mg/kg.

Sodium hydroxide: LD50 Oral - Rat - 140 mg/kg.

Dermal:

Sodium hydroxide: LD50 Dermal - Rabbit - 1350 mg/kg.

Skin corrosion/irritation:

Sodium hydroxide: Rabbit: Causes severe burns - 24 h.

Serious eye damage/irritation:

Sodium hydroxide: Rabbit: Corrosive - 24h.

Respiratory or skin sensitization:

No information available.

Carcinogenicity: No information available.

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

Germ cell mutagenicity:

No information available.

Reproductive toxicity:

No information available.

STOT-single and repeated exposure:

No information available.

Aspiration toxicity:

No information available.

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Additional toxicological information:

No information available.

SECTION 12: Ecological information

Ecotoxicity:

Sodium hydroxide: Fish, LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h.

Persistence and degradability:

No information available.

Bioaccumulative potential:

No information available.

Mobility in soil:

No information available.

Other adverse effects:

No information available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities.

SECTION 14: Transport information

Land transport:

Canadian Transportation of Dangerous Goods

UN Number:	Not Regulated
UN Proper shipping name:	Not Regulated
UN Transport hazard classes:	
Packing group:	Not Regulated
Danger label:	
Environmental hazards:	No
Special precautions for user:	None

Air transport:

IATA-DGR

UN Number:	Not Regulated
UN Proper shipping name:	Not Regulated
UN Transport hazard classes:	
Packing group:	Not Regulated
Danger label:	

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Environmental hazards:	No
Special precautions for user:	None

Sea transport:

IMDG

UN Number:	Not Regulated
UN Proper shipping name:	Not Regulated
UN Transport hazard classes:	
Packing group:	Not Regulated
Danger label:	
EMS code:	None
Environmental hazards:	No
Special precautions for user:	None
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable

SECTION 15: Regulatory information

North American

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 302 (Extremely hazardous substances):

SARA Section 313 (Specific toxic chemical listings):

TSCA (Toxic Substances Control Act):

6381-92-6 EDTA Disodium Salt Dihydrate: not listed.

7791-18-6 Magnesium chloride, hexahydrate: not listed.

1310-73-2 Sodium hydroxide: listed.

7732-18-5 Water: listed.

TSCA Rules and Orders:

Not applicable.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

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DSL (Canadian Domestic Substances List):

6381-92-6 EDTA Disodium Salt Dihydrate: listed.

7791-18-6 Magnesium chloride, hexahydrate: not listed.

1310-73-2 Sodium hydroxide: listed.

7732-18-5 Water: listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

This product has been classified in accordance with hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-0-0

HMIS: 2-0-0

Date of Preparation: 09.26.2016