according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.15.2015

Hardness Indicator Liquid

SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Hardness Indicator Liquid

Manufacturer/Supplier Article number: HA7430SS

Recommended uses of the product and restrictions on use: Laboratory

Manufacturer Details:

AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour)

+1(800)255-3924 +1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture:

Not classified for physical or health hazards under GHS.

Signal word: None

Hazard statements:

None

Precautionary statements:

Read label before use. Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

| Ingredients: | | |
|---------------|-----------------|---------------------------|
| CAS 3147-14-6 | Calmagite | <0.1 % |
| CAS 7732-18-5 | Deionized water | >99 % |
| | | Percentages are by weight |

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

After skin contact:

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.15.2015

Hardness Indicator Liquid

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. 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 assistance if discomfort or irritation persists.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation, discomfort, or vomiting persists. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: None Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use means suitable to extinguishing surrounding fire.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture: None **Advice for firefighters:**

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyeware, gloves, and clothing. Always obey local regulations. Containerize for disposal. Refer to Section 13. If necessary use trained response staff or contractor. Keep in suitable closed containers for disposal.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

Conditions for safe storage, including any incompatibilities:

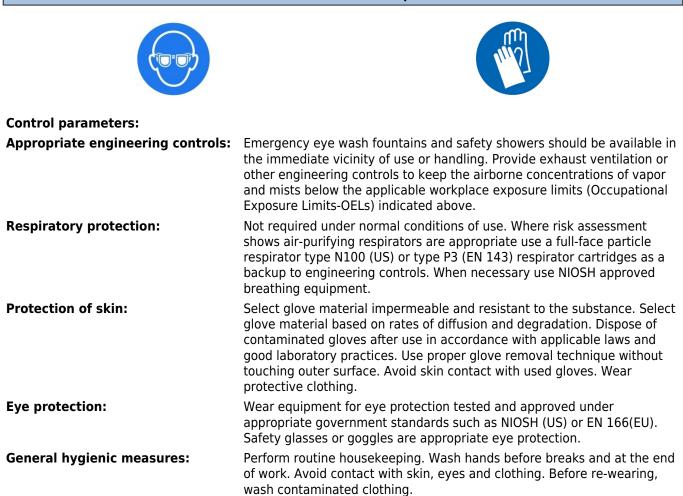
Store in a cool location.

SECTION 8: Exposure controls/personal protection

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.15.2015

Hardness Indicator Liquid



SECTION 9: Physical and chemical properties

| Appearance (physical state, color): | Clear, Purple liquid | Explosion limit lower: Explosion limit upper: | Not determined Not determined |
|-------------------------------------|----------------------|--|--|
| Odor: | Calmagite odor | Vapor pressure at 20°C: | 14 mmHg at 20°C |
| Odor threshold: | Not determined | Vapor density: | Not determined |
| pH-value: | Not determined | Relative density: | Approximately 1 |
| Melting/Freezing point: | Approx. 0°C | Solubilities: | Infinite solubility. |
| Boiling point/Boiling range: | Approx. 100°C | Partition coefficient (n- octanol/water): | Not determined |
| Flash point (closed cup): | Not Applicable | Auto/Self-ignition temperature: | Not determined |
| Evaporation rate: | >1 | Decomposition temperature: | Not determined |
| Flammability (solid, gaseous): | Not determined | Viscosity: | a. Kinematic: Not determined b. Dynamic: Not determined |
| Density at 20°C: | Not determined | | |

SECTION 10: Stability and reactivity

Reactivity:

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.15.2015

Hardness Indicator Liquid

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Excess heat.

Incompatible materials: None Hazardous decomposition products: None

SECTION 11: Toxicological information

Acute Toxicity: None Chronic Toxicity: No additional information. Skin corrosion/irritation: No additional information. Serious eye damage/irritation: No additional information. Respiratory or skin sensitization: No additional information. Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. Reproductive Toxicity: No additional information. STOT-single and repeated exposure: No additional information. Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity: No additional information. Persistence and degradability: No additional information. Bioaccumulative potential: No additional information. Mobility in soil: No additional information. Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

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

SECTION 14: Transport information

US DOT

UN Number: ADR, ADN, DOT, IMDG, IATA

Not regulated

Limited Quantity Exception:

None

Bulk: RQ (if applicable): None Non Bulk: RQ (if applicable): None

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.15.2015

| Hardness | Indicator | Liquid |
|----------|-----------|--------|
|----------|-----------|--------|

| Proper shipping Name: Not regulated. | Proper shipping Name: Not regulated. |
|--------------------------------------|--------------------------------------|
| Hazard Class: None | Hazard Class: None |
| Packing Group: Not regulated. | Packing Group: Not regulated. |
| Marine Pollutant (if applicable): No | Marine Pollutant (if applicable): No |
| Comments: None | Comments: None |

SECTION 15: Regulatory information

United States (USA)

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

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

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.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

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.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.15.2015

Hardness Indicator Liquid

NFPA: 1-0-0 HMIS: 1-0-0 GHS Full Text Phrases: None

Abbreviations and Acronyms:

- IMDG International Maritime Code for Dangerous Goods.
- PNEC. Predicted No-Effect Concentration (REACH).
- CFR Code of Federal Regulations (USA)
- SARA Superfund Amendments and Reauthorization Act (USA).
- RCRA. Resource Conservation and Recovery Act (USA).
- TSCA. Toxic Substances Control Act (USA).
- NPRI National Pollutant Release Inventory (Canada).
- DOT US Department of Transportation.
- IATA International Air Transport Association.
- GHS Globally Harmonized System of Classification and Labelling of Chemicals.
- ACGIH American Conference of Governmental Industrial Hygienists
- CAS Chemical Abstracts Service (division of the American Chemical Society).
- NFPA National Fire Protection Association (USA).
- HMIS Hazardous Materials Identification System (USA).
- WHMIS Workplace Hazardous Materials Information System (Canada).
- DNEL Derived No-Effect Level (REACH).