according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: October 25, 2018

1 Identification

· Product identifier

· Trade name: Hardness Indicator Powder

· Product code: FEDHA7475-H

· Recommended use and restriction on use

· Recommended use: Laboratory chemicals

Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331 Phone: (717)632-1291

Toll-Free: (866)632-1291

info@aguaphoenixsci.com

· Distributor:

Fisher Science Education 6771 Silver Crest Road, Nazareth, PA 18064

(800) 955-1177

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

Combustible Dust May form combustible dust concentrations in air.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · **Hazard pictograms:** Not regulated.
- Signal word: Warning
- · Hazard statements:

May form combustible dust concentrations in air.

· Additional information:

Read the label and safety data sheet before use. Prevent dust accumulations to minimize explosion hazard. Keep away from all ignition sources including heat, sparks and flame.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:

57-50-1 Sucrose, pure Combustible Dust

>95%

(Cont'd. on page 2)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: October 25, 2018

Trade name: Hardness Indicator Powder

(Cont'd. of page 1)

1787-61-7 sodium 3-hydroxy-4-[(1-hydroxy-2-naphthyl)azo]-7-nitronaphthalene-1-sulphonate

• Eve Irrit. 2A. H319

<1%

Additional information:

For the wording of the listed Hazard Statements, refer to section 16.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

- Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Generally the product does not irritate the skin.

Brush off loose particles from skin.

Wash with soap and water.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

- Most important symptoms and effects, both acute and delayed: No relevant information available.
- · Indication of any immediate medical attention and special treatment needed:

No relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

- For safety reasons unsuitable extinguishing agents: No relevant information available.
- Special hazards arising from the substance or mixture

May form combustible dust concentrations in air.

- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Avoid formation of dust.

- · Environmental precautions No special measures required.
- · Methods and material for containment and cleaning up

Pick up mechanically.

Dispose of the collected material according to regulations.

Reference to other sections

(Cont'd. on page 3)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: October 25, 2018

Trade name: Hardness Indicator Powder

(Cont'd. of page 2)

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- Handling
- · Precautions for safe handling: Prevent formation of dust.
- Information about protection against explosions and fires:

Avoid dust cloud formation. Keep ignition sources away. No smoking.

- Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles:

Storage area should be dry and well-ventilated.

Store in cool, dry conditions in well sealed receptacles.

- Information about storage in one common storage facility: No relevant information available.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters

Components with limit values that require monitoring at the workplace:		
57-50-1 Sucrose, pure		
PEL (USA)	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction	
REL (USA)	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction	
TLV (USA)	Long-term value: 10 mg/m³	
EL (Canada)	Long-term value: 10* 3** mg/m³ *total dust;**respirable fraction	
EV (Canada)	Long-term value: 10 mg/m³ total dust	
LMPE (Mexico)	Long-term value: 10 mg/m³ A4	

- Exposure controls
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

- · Engineering controls: Provide adequate ventilation.
- · Breathing equipment: Not required under normal conditions of use.
- · Protection of hands: Gloves not required under normal conditions of use.
- Eye protection: Follow relevant national guidelines concerning the use of protective eyewear.
- **Body protection:** Protective work clothing
- Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures No special requirements.

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: October 25, 2018

Trade name: Hardness Indicator Powder

(Cont'd. of page 3)

9 Physical and chemical properties			
Information on basic physical and chemical properties			
· Appearance: Form:	Powder		
Color:	According to product specification		
· Odor:	Odorless		
· Odor threshold:	Not determined.		
· pH-value:	Not applicable.		
Melting point/Melting range:	Not determined.		
· Boiling point/Boiling range:	Not determined.		
· Flash point:	The product is not flammable.		
· Flammability (solid, gaseous):	May form combustible dust concentrations in air.		
· Auto-ignition temperature:	Not determined.		
· Decomposition temperature:	Not determined.		
· Danger of explosion:	Product does not present an explosion hazard.		
· Explosion limits			
Lower:	Not determined.		
Upper:	Not determined.		
Oxidizing properties:	Not determined.		
· Vapor pressure:	Not determined.		
· Density:			
Relative density:	0.94		
Vapor density:	Not applicable.		
Evaporation rate:	Not applicable.		
· Solubility in / Miscibility with			
Water:	Soluble.		
· Partition coefficient (n-octanol/water): Not determined.			
· Viscosity			
Dynamic:	Not applicable.		
Kinematic:	Not applicable.		
· Other information	No relevant information available.		

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Risk of dust explosion if enriched with fine dust in the presence of air.

· Conditions to avoid Prevent formation of dust.

(Cont'd. on page 5)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: October 25, 2018

Trade name: Hardness Indicator Powder

(Cont'd. of page 4)

- · **Incompatible materials** No relevant information available.
- · Hazardous decomposition products

Under fire conditions only:

Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.
- IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eve contact.

Skin contact.

- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- · **Mobility in soil:** No relevant information available.
- Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Other adverse effects No relevant information available.

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: October 25, 2018

Trade name: Hardness Indicator Powder

(Cont'd. of page 5)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
- Recommendation: Disposal must be made according to official regulations.

14 Transport information		
· UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
· UN proper shipping name · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
· Transport hazard class(es)		
· DOT, ADR/RID/ADN, IMDG, IATA · Class	Not regulated.	
· Packing group · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
· Environmental hazards · Marine pollutant:	No	
· Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.		

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

57-50-1 Sucrose, pure

(Cont'd. on page 7)

Page: 7/7

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: October 25, 2018

Trade name: Hardness Indicator Powder

(Cont'd. of page 6)

1787-61-7 sodium 3-hydroxy-4-[(1-hydroxy-2-naphthyl)azo]-7-nitronaphthalene-1-sulphonate

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

EPA (Environmental Protection Agency):

None of the ingredients are listed.

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

None of the ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com