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

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1 Identification

· Product identifier

· Trade name: Dentstone

· Product code: LNDN-5100-2LB

· 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 USA

Tel +1 (717)632-1291

Toll-Free: (866)632-1291

info@aquaphoenixsci.com

· Distributor:

Learn Engines

52 Broadway Suite 2-7,

Greenlawn, NY 11740

(631) 262-7110

· 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

Carc. 1A H350 May cause cancer. Route of exposure: Inhalation.

STOT RE 1 H372 Causes damage to the lung through prolonged or repeated exposure. Route of

exposure: Inhalation.

- · Label elements
- · GHS label elements

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

· Hazard pictograms:



GHS08

· Signal word: Danger

Hazard statements:

H350 May cause cancer. Route of exposure: Inhalation.

H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

· Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust.

P264 Wash thoroughly after handling.

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P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves and eye protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:				
10034-76-1	calcium sulfate hemihydrate	65-75%		
	Plaster of Paris (Calcium sulfate)	20-30%		
	Eye Dam. 1, H318 Skin Irrit. 2, H315			
14808-60-7	Quartz (SiO2)	1-5%		
	🕸 Carc. 1A, H350; STOT RE 1, H372			
12125-02-9	ammonium chloride	1-5%		
	♦ Acute Tox. 4, H302; Eye Irrit. 2A, H319			

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After skin contact:

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn, if possible.

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: Mechanical irritation to eyes.
- · Danger:

Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation. May cause cancer. Route of exposure: Inhalation.

Indication of any immediate medical attention and special treatment needed:

Medical supervision for at least 48 hours.

If medical advice is needed, have product container or label at hand.

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5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Avoid formation of dust.

- · Environmental precautions Avoid release to the environment.
- · Methods and material for containment and cleaning up

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Reference to other sections

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 aerosols.

Use only in well ventilated areas.

- · Information about protection against explosions and fires: The product is not flammable.
- Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles:

Storage area should be dry and well-ventilated.

Keep cool.

· Information about storage in one common storage facility:

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Store away from foodstuffs.

- · Further information about storage conditions: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

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	(Oonta. or page o					
8 Exposure co	ontrols/personal protection					
· Control parameters						
· Components w	Components with limit values that require monitoring at the workplace:					
26499-65-0 Plas	ster of Paris (Calcium sulfate)					
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					
EL (Canada)	Short-term value: 20* mg/m³ Long-term value: 10* 3** mg/m³ *total dust;**respirable fraction					
12125-02-9 ammonium chloride						
REL (USA)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³					
TLV (USA)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³					
EL (Canada)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³ fume					
EV (Canada)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³ fume					
LMPE (Mexico)	Short-term value: 20 mg/m³ Long-term value: 10 mg/m³					
14808-60-7 Qua	artz (SiO2)					
PEL (USA)	Long-term value: 0.05* mg/m³ *resp. dust; 30mg/m3/%SiO2+2					
REL (USA)	Long-term value: 0.05* mg/m³ *respirable dust; See Pocket Guide App. A					
TLV (USA)	Long-term value: 0.025* mg/m³ *as respirable fraction					
EL (Canada)	Long-term value: 0.025 mg/m³ ACGIH A2; IARC 1					
EV (Canada)	Long-term value: 0.10* mg/m³ *respirable fraction					
LMPE (Mexico)	Long-term value: 0.025* mg/m³ A2, *fracción respirable					

Exposure controls

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Engineering controls: Provide adequate ventilation.

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- Breathing equipment: A NIOSH approved dust respirator should be used for operations generating dust.
- · Protection of hands:



Protective gloves

· Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Protective work clothing
- · Limitation and supervision of exposure into the environment No relevant information available.
- · Risk management measures No relevant information available.

Information on basic physical	and chemical properties		
Appearance: Form:	Powder		
Color:	White		
Odor:	Not determined.		
Odor threshold:	Not determined.		
pH-value:	Not determined.		
Melting point/Melting range:	Not determined.		
Boiling point/Boiling range:	Not determined.		
Flash point:	Not applicable.		
Flammability (solid, gaseous):	Not applicable.		
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:	Non-oxidizing.		
Vapor pressure:	Not determined.		
Density:	2.3 g/cm³ (19.19 lbs/gal)		
Relative density:	Not determined.		
Vapor density:	Not determined.		
Evaporation rate:	Not determined.		

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Water: Slightly soluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity

Dynamic: Not determined. **Kinematic:** Not determined.

• 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 No dangerous reactions known.
- Conditions to avoid

Prevent formation of dust.

Excessive heat.

Incompatible materials

Acids.

Alkalis.

· Hazardous decomposition products

Under fire conditions only:

Sulfur oxides (SOx)

Silicon oxides.

Chlorine

Ammonia

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:

ATE (Acute Toxicity Estimate)

Oral LD50 33000-165000 mg/kg (rat)

12125-02-9 ammonium chloride

Oral LD50 1650 mg/kg (rat)

- Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Mechanical irritation only.
- · Sensitization: Based on available data, the classification criteria are not met.
- · IARC (International Agency for Research on Cancer):

14808-60-7 Quartz (SiO2)

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NTP (National Toxicology Program):

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(Cont'd. of page 6) 14808-60-7 Quartz (SiO2)

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion.

Inhalation.

Eve contact.

Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): Mechanical irritation to eyes.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: May cause cancer. Route of exposure: Inhalation.
- · 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:

Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

· 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: Avoid release to the environment.
- · Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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.

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		(Cont'd. of page 7)		
· 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	Not applicable.			
· 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)

All ingredients are listed or exempt.

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

14808-60-7 Quartz (SiO2)

· 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):

14808-60-7 Quartz (SiO2)

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· Canadian Domestic Substances List (DSL):

All ingredients listed on DSL or NDSL.

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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

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Carc. 1A: Carcinogenicity - Category 1A

STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1

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

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