Safety Data Sheet acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: March 21, 2019

Revision: March 20, 2019

| Product id | entifier |
|--|---|
| Trade name Product co CAS Numb 288-32-4 | de: IM1000 |
| Recommen | ded use and restriction on use ded use: Laboratory chemicals s on use: No relevant information available. |
| Manufactur AquaPhoen 860 Gitts Ru Hanover, PA Phone: (717 Toll-Free: (8 | x 17331 |
| ChemTel In (800)255-39 | telephone number: C. 24 (North America) -0585 (International) |
| | |
| Hazard(s) | identification |
| Classifica | ion of the substance or mixture |
| Acute Tox. 4 | H302 Harmful if swallowed. |
| Skin Corr. 1 | C H314 Causes severe skin burns and eye damage. |
| Eye Dam. 1 | H318 Causes serious eye damage. |
| Repr. 1B | H360 May damage fertility or the unborn child. |
| Label elen GHS label e The product Hazard pict | lements is classified and labeled according to the Globally Harmonized System (GHS). |
| GHS05 GH | 07 GHS08 |
| GHS05 GH | 507 GHS08 |
| Signal word Hazard stat H302 Harmi H314 Cause H360 May d | I: Danger ements: ul if swallowed. s severe skin burns and eye damage. amage fertility or the unborn child. |
| Signal word Hazard stat H302 Harmi H314 Cause H360 May d Precaution P201 | I: Danger ements: ul if swallowed. s severe skin burns and eye damage. |
| Signal word Hazard stat H302 Harmi H314 Cause H360 May d Precaution P201 P202 | d: Danger ements: ul if swallowed. es severe skin burns and eye damage. amage fertility or the unborn child. ary statements: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. |
| Signal word Hazard stat H302 Harmi H314 Cause H360 May d Precaution P201 | d: Danger ements: ul if swallowed. es severe skin burns and eye damage. amage fertility or the unborn child. ary statements: Obtain special instructions before use. |

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| P271 | Use only outdoors or in a well-ventilated area. |
| | Wear eye protection / face protection. |
| P280 | Wear protective gloves/protective clothing/eye protection. |
| P301+P330+P331 | If swallowed: Rinse mouth. Do NOT induce vomiting. |
| | If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin wi water/shower. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, present and easy to do. Continue rinsing. |
| P310 | Immediately call a poison center/doctor. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P363 | Wash contaminated clothing before reuse. |
| | Store locked up. |
| | Dispose of contents/container in accordance with local/regional/national/internation regulations. |

3 Composition/information on ingredients

· Chemical characterization: Substances

- · CAS No. Description
- 288-32-4 imidazole

4 First-aid measures

| · Description of first aid measures | |
|---|---------------------|
| • After inhalation: Supply fresh air; consult doctor in case of complaints. | |
| · After skin contact: | |
| Brush off loose particles from skin. | |
| Immediately rinse with water. | |
| Seek immediate help for blistering or open wounds. | |
| · After eye contact: | |
| Protect unharmed eye. | |
| Remove contact lenses if worn. | |
| Rinse opened eye for several minutes under running water. Then 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: | |
| Caustic effect on skin and mucous membranes. | |
| Gastric or intestinal disorders when ingested. | |
| · Danger: | |
| Danger of gastric perforation. | |
| Danger of disturbed cardiac rhythm. | |
| Causes serious eye damage. | |
| Harmful if swallowed. | |
| Indication of any immediate medical attention and special treatment needed: | |
| Medical supervision for at least 48 hours. | |
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If medical advice is needed, have product container or label at hand.

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 Isolate area and prevent access.

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

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

· Environmental precautions Do not allow to enter sewers/ surface or ground water.

• Methods and material for containment and cleaning up Pick up mechanically.

Sweep up and place into an appropriate container.

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 dust.

Any deposit of dust which cannot be avoided must be regularly removed.

Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.

- Use only in well ventilated areas.
- · Information about protection against explosions and fires: No special measures required.

· Conditions for safe storage, including any incompatibilities

· Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

• Information about storage in one common storage facility: Store away from foodstuffs.

Do not store together with acids.

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Store away from oxidizing agents. • Further information about storage conditions: Keep containers tightly sealed.

• 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: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. · Exposure controls · General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin. · Engineering controls: Provide adequate ventilation. · Breathing equipment: Use suitable respiratory protective device when high concentrations are present. NIOSH or EN approved organic vapor respirator equipped with a dust/mist prefilter should be used. · Protection of hands: Protective gloves · Material of gloves Nitrile rubber, NBR · Eve 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.

| 9 Physical and chemical properties | | |
|------------------------------------|--------------------------------|--------------------|
| | vsical and chemical properties | |
| Appearance: | | |
| Form: | Crystalline | |
| | Flakes | |
| Color: | White | |
| · Odor: | Amine-like | |
| · Odor threshold: | Not determined. | |
| | | (Cont'd. on page 5 |

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|--|---|------------------|
| · pH-value: | Not applicable. | |
| Melting point/Melting range: | 89-91 °C (192.2-195.8 °F) | |
| Boiling point/Boiling range: | 256 °C (492.8 °F) | |
| · Flash point: | 145 °C (293 °F) | |
| | The product is not flammable. | |
| · Flammability (solid, gaseous): | Product is not flammable. | |
| · 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 at 20 °C (68 °F): | 1.03 g/cm³ (8.6 lbs/gal) | |
| · Relative density: | Not determined. | |
| Vapor density: | Not applicable. | |
| · Evaporation rate: | Not applicable. | |
| · Solubility in / Miscibility with | | |
| Water: | Soluble. | |
| · Partition coefficient (n-octanol/wat | er): 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** Reacts with strong oxidizing agents. Reacts with strong acids.
- · Conditions to avoid No relevant information available.
- · Incompatible materials
- Acids.

Oxidizing agents

· Hazardous decomposition products

Under fire conditions only:

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Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen cyanide (prussic acid)

11 Toxicological information

· Information on toxicological effects

- · Acute toxicity: Harmful if swallowed.
- · LD/LC50 values that are relevant for classification:

288-32-4 imidazole

Oral LD50 880 mg/kg (mouse)

Primary irritant effect:

• On the skin: Caustic effect on skin and mucous membranes.

- · On the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):

Substance is not listed.

· NTP (National Toxicology Program):

Substance is not listed.

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

Substance is not listed.

· Probable route(s) of exposure:

- Ingestion.
- Inhalation.

Eye contact.

Skin contact.

- Acute effects (acute toxicity, irritation and corrosivity): Causes severe skin burns and eye damage.
- Repeated dose toxicity: Danger of very serious irreversible effects.
- 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: May damage fertility or the unborn child.
- · 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 product to reach ground water, water course or sewage system.

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Must not reach bodies of water or drainage ditch undiluted or unneutralized. Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

· Other adverse effects No relevant information available.

13 Disposal considerations

· Uncleaned packagings

• Recommendation: Disposal must be made according to official regulations.

| 4 Transport information | |
|---|---|
| · UN-Number · DOT, ADR/RID/ADN, IMDG, IATA | UN3263 |
| | 0103203 |
| · UN proper shipping name | |
| · DOT · ADR/RID/ADN, IATA | Corrosive solid, basic, organic, n.o.s. (Imidazole) CORROSIVE SOLID, BASIC, ORGANIC, N.O.S |
| | (IMIDAZOLE) |
| ·IMDG | CORROSIVE SOLID, BASIC, ORGANIC, N.O.S (IMIDAZOLE), MARINE POLLUTANT |
| · Transport hazard class(es) | |
| · DOT | |
| COSTONE L | |
| · Class | 8 |
| · Label | 8 |
| · ADR/RID/ADN | |
| | |
| · Class | 8 (C8) |
| · Label | 8 |
| ·IMDG | |
| | |
| · Class | 8 |
| · Label | 8 |
| | (Cont'd. on page |

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|--|---------------------------------|------------------|
| | | |
| A A A A A A A A A A A A A A A A A A A | | |
| | | |
| · Class | 8 | |
| · Label | 8 | |
| · Packing group | | |
| · DOT, ADR/RID/ADN, IMDG, IATA | III | |
| · Environmental hazards | | |
| · Marine pollutant: | Yes (DOT) | |
| | Symbol (fish and tree) | |
| Special precautions for user | Warning: Corrosive substances | |
| Danger code (Kemler): | 80 | |
| EMS Number: | F-A,S-B | |
| · Segregation groups | Alkalis | |
| · Transport in bulk according to Annex | ll of | |
| MARPOL73/78 and the IBC Code | Not applicable. | |
| · Transport/Additional information: | | |
| DOT | | |
| · Quantity limitations | On passenger aircraft/rail: 5 L | |
| | On cargo aircraft only: 60 L | |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
 United States (USA)
 SARA
 Section 302 (extremely hazardous substances):
 Substance is not listed.
 Section 355 (extremely hazardous substances):
 Substance is not listed.
 Section 313 (Specific toxic chemical listings):
 Substance is not listed.
 TSCA (Toxic Substances Control Act)
 Substance is listed.
 Proposition 65 (California)
 Chemicals known to cause cancer:
 - Substance is not listed.

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· Chemicals known to cause developmental toxicity for females:

Substance is not listed.

· Chemicals known to cause developmental toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· EPA (Environmental Protection Agency):

Substance is not listed.

· IARC (International Agency for Research on Cancer):

Substance is not listed.

· Canadian Domestic Substances List (DSL) (Substances not listed.):

Substance is 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 PBT: Persistant, Bio-accumulable, Toxic vPvB: very Persistent and very Bioaccumulative OSHA: Occupational Safety & Health Administration Acute Tox. 4: Acute toxicity - Category 4 Skin Corr. 1C: Skin corrosion/irritation - Category 1C Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Repr. 1B: Reproductive toxicity - Category 1B 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

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