

**HAEMO-SOL®**

Haemo-Sol Enzyme Active

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 06/04/2019

Revision date: 06/04/2019

Version: 1.0

SECTION 1: Identification

1.1. Identification

Product name : Haemo-Sol Enzyme Active
Product code : 026-055

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Enzymatic Cleaner and Pre-Soak

1.3. Details of the supplier of the safety data sheet

Manufacturer

HAEMO-SOL INTERNATIONAL, LLC
7301 YORK ROAD, BALTIMORE, MD 21204 US
T 410-821-5676; Toll-Free: 800-821-5676 - F 410- 828-8461

1.4. Emergency telephone number

Emergency number : ChemTel, Inc.: +01-813-248-0585 (24-Hour, 7 days a week, 365 days)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

GHS classification

Eye Dam. 1
Resp. Sens. 1
Comb. Dust

2.2. Label elements

GHS labelling

Hazard pictograms (GHS) :



GHS05



GHS08

Signal word (GHS) :

Danger

Hazard statements (GHS) :

Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May form combustible dust concentrations in air

Precautionary statements (GHS) :

Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

Haemo-Sol Enzyme Active

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

3.2. Mixtures

Name	Product identifier	%
Sodium Carbonate	(CAS-No.) 497-19-8	10 - 30
Alcohols, C16-18, ethoxylated	(CAS-No.) 68439-49-6	1 - 5
Benzenesulfonic acid, C10-16-alkyl derivatives, sodium salts	(CAS-No.) 68081-81-2	1 - 5
Tetrasodium pyrophosphate	(CAS-No.) 7722-88-5	1 - 5
Alcohols, C12-14-secondary, ethoxylated	(CAS-No.) 84133-50-6	0.5 - 1.5
Subtilisins (proteolytic enzymes)	(CAS-No.) 9014-01-1	0.1 - 1

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
- First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
- Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
- Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
- Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible dust. Products of combustion may include, and are not limited to: oxides of carbon, ammonia, oxides of nitrogen, cyanuric acid, cyanic acid, biuret.
- Explosion hazard : Airborne dust in sufficient concentrations when confined and exposed to a sufficient ignition source can explode.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Use only non-sparking tools.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

Haemo-Sol Enzyme Active

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Avoid generating dust. Do not breathe dust. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Provide adequate ventilation. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Handling this product may result in electrostatic accumulation. Use proper grounding procedures.
- Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep away from sources of ignition. Keep out of the reach of children. Keep container tightly closed. Store in dust-tight, dry, labelled containers. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium Carbonate (497-19-8)		
Not applicable		
Alcohols, C16-18, ethoxylated (68439-49-6)		
Not applicable		
Benzenesulfonic acid, C10-16-alkyl derivatives, sodium salts (68081-81-2)		
Not applicable		
Tetrasodium pyrophosphate (7722-88-5)		
NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³
Alcohols, C12-14-secondary, ethoxylated (84133-50-6)		
Not applicable		
Subtilisins (proteolytic enzymes) (9014-01-1)		
ACGIH	ACGIH Ceiling (mg/m ³)	0.00006 mg/m ³ (Subtilisins)
NIOSH	NIOSH REL (STEL) (mg/m ³)	0.00006 mg/m ³ (Subtilisins)

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e, there is not leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.
- Hand protection : Wear suitable gloves.
- Eye protection : Wear eye/face protection.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Avoid release to the environment.
- Other information : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

Haemo-Sol Enzyme Active

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Free-flowing powder and granules.
Colour	: White
Odour	: Odourless
Odour threshold	: No data available
pH	: No data available
pH solution	: 9.5 - 10.5
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Combustible dust.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions of use. May form combustible dust concentrations in air.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials. Avoid dust formation.

10.5. Incompatible materials

Acids, oxidizing agents, Fluorine, aluminum, phosphorous pentoxide, sulfuric acid, zinc, lithium, moisture, calcium hydroxide and 2,4,6-trinitrotoluene, calcium hypochlorite, sodium hypochlorite, sodium nitrite, gallium perchlorate, phosphorus pentachloride, nitrosyl perchlorate, titanium tetrachloride, chromyl chloride.

10.6. Hazardous decomposition products

May include and are not limited to: oxides of carbon, ammonia, oxides of nitrogen, cyanuric acid, cyanic acid, biuret.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

Haemo-Sol Enzyme Active

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Alcohols, C16-18, ethoxylated (68439-49-6)	
LD50 oral rat	1260 mg/kg
ATE CA (oral)	1260 mg/kg bodyweight
Benzenesulfonic acid, C10-16-alkyl derivatives, sodium salts (68081-81-2)	
ATE CA (oral)	500 mg/kg bodyweight
Tetrasodium pyrophosphate (7722-88-5)	
LD50 oral rat	1000 - 3000 mg/kg
ATE CA (oral)	1000 mg/kg bodyweight
Subtilisins (proteolytic enzymes) (9014-01-1)	
LD50 oral rat	3700 mg/kg
LD50 oral	370 mg/kg
ATE CA (oral)	370 mg/kg bodyweight

Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.

Benzenesulfonic acid, C10-16-alkyl derivatives, sodium salts (68081-81-2)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.
Symptoms/effects after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
-------------------	---

Sodium Carbonate (497-19-8)	
LC50 fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	310 - 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Alcohols, C12-14-secondary, ethoxylated (84133-50-6)	
LC50 fish 1	3.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	3.2 mg/l (Exposure time: 48 h - Species: water flea)

Subtilisins (proteolytic enzymes) (9014-01-1)	
LC50 fish 1	200 mg/l

12.2. Persistence and degradability

Haemo-Sol Enzyme Active	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Haemo-Sol Enzyme Active	
Bioaccumulative potential	Not established.

Haemo-Sol Enzyme Active

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Sodium Carbonate (497-19-8)

BCF fish 1	(no bioaccumulation)
------------	----------------------

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT/TDG

Not regulated

SECTION 15: Regulatory information

15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories except for:

Subtilisins (proteolytic enzymes)	CAS-No. 9014-01-1
-----------------------------------	-------------------

15.2. International regulations

No additional information available

15.3. US State regulations

 **WARNING:** This product can expose you to Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Revision date : 06/04/2019

Other information : Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.