

**HAEMO-SOL, INC.<sup>®</sup>**  
*The Original "Hospital Specified" Cleaner*  
**MATERIAL SAFETY DATA SHEET**

**1. IDENTIFICATION OF THE SUBSTANCE**

**Product Name:** Haemo-Sol Non-Phosphate

**Product Code:** 026-058

**Product Use:** Phosphate-Free General Purpose Cleaner

**Manufacturer:**

Haemo-Sol, Inc.  
7301 York Road  
Baltimore, MD 21204

**Tel:** 410-821-5676

**Fax:** 410-828-8461

**Email:** haemosol@haemo-sol.com

**2. HAZARDS IDENTIFICATION**

**PHYSICAL HAZARDS:** May cause irritation to eyes, skin, and respiratory tract.

**HEALTH HAZARDS (ACUTE AND CHRONIC):**

**Eye Contact:** May cause irritation and redness. Contact of Sodium Carbonate may be corrosive to eyes and cause conjunctival edema and corneal destruction.

**Skin:** Prolonged contact may irritate skin and cause redness to occur. The DEA can be severely irritating to the skin.

**Inhalation:** May irritate the upper respiratory tract and mucus membranes. Urea may be absorbed into the bloodstream with symptoms similar to ingestion.

**Ingestion:** May be harmful if swallowed. May cause discomfort/diarrhea or stomach distress.

**Chronic Exposure:** A study of 67 workers in an environment with high airborne concentrations of urea found a high incidence of protein metabolism disturbances, moderate emphysema, and chronic weight loss.

**Aggravation of Pre-existing Conditions:** Supersensitive individuals with skin or eye problems, kidney impairment or asthmatic condition should have physician's approval before exposure to urea dust.

**SIGNS AND SYMPTOMS OF EXPOSURE:**

**Eye Contact:** Burning, irritation, pain, and redness of eyes. Risk of serious injury from Sodium Carbonate increases if eyes are kept tightly closed and other symptoms may appear from absorption of into the bloodstream via the eyes.

**Skin Contact:** Irritation may include redness, itching and pain.

**Inhalation:** Sneezing, coughing, shortness of breath.

**Ingestion:** Burning or irritation to mouth and esophagus, stomach pain or discomfort. Urea may also cause headache, confusion, and electrolyte depletion.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Refer to Section 8

**Environmental Precautions:** None

**Clean-up Procedures:** Pick up and place in a suitable container for reclamation or disposal. Do not let this chemical enter the environment.

**7. HANDLING AND STORAGE**

**Handling Requirements:** Keep out of reach of children. Do not get in eyes, on skin, or on clothing.

**Storage Conditions:** Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage.

**Suitable Packaging:** Plastics, stainless steel

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE GUIDELINES:**

Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure.

Particulates Not Otherwise Regulated:

OSHA (PEL/TWA): 15 mg/m<sup>3</sup> (total dust); 5 mg/m<sup>3</sup> (resp fraction)

**Engineering Controls:** Provide local exhaust ventilation.

**Respiratory Protection:** None required for expected product use.

**Hand/Skin Protection:** Protective gloves and body-covering clothing recommended.

**Eye Protection:** Safety glasses recommended. Have eye-wash facilities immediately available.

**General Hygiene Considerations:** Wash hands thoroughly after handling. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Boiling Point:** N/A

**Vapor Pressure (mmHg):** N/A

**Vapor Density (Air-1):** N/A

**Order Threshold:** N/A

**Coefficient of Water/Oil Distribution:** N/A

**Scooped Density:** N/A

**Appearance and Odor:** White, free flowing powder and granules. No significant odor.

**Specific Gravity (H<sub>2</sub>O=1):** N/A

**Percent Volatile by Volume (%):** N/A

**Evaporation Rate (nBuOAc-1):** N/A

**Freezing Point:** N/A

**pH (1% solution):** 10.0 -11.0

**Solubility in Water:** Appreciable

**Reserve Alkalinity:** N/D

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**10. STABILITY AND REACTIVITY**

**Stability:** This product is stable under ordinary use and storage conditions.

**Incompatibility (Materials to Avoid):**

Avoid oxidizing agents and acids. Avoid contact with bare aluminum. Flammable hydrogen gas may be produced in contact with bare aluminum. Sodium Carbonate reacts with Fluorine, aluminum, phosphorous pentoxide, sulfuric acid, zinc, lithium, moisture, calcium hydroxide and 2,4,6-trinitrotoluene, and reacts violently with acids to form carbon dioxide. Urea reacts with calcium hypochlorite or sodium hypochlorite to form the explosive nitrogen trichloride. It is incompatible with sodium nitrite, gallium perchlorate, strong oxidizing agents (permanganate, dichromate, nitrate, chlorine), phosphorus pentachloride, nitrosyl perchlorate, titanium tetrachloride and chromyl chloride.

**Hazardous Decomposition/By Products:**

Carbon dioxide and carbon monoxide may form when heated to decomposition. Urea decomposes upon heating and can form products including ammonia, oxides of nitrogen, cyanuric acid, cyanic acid, biuret, carbon dioxide.

**Hazardous Polymerization:** Will not occur

**Conditions to Avoid:** Avoid heat, flames, ignition sources and incompatibles.

**Other Recommendations:** Read and follow all directions for use.

**11. TOXICOLOGICAL INFORMATION**

**ACUTE EFFECTS**

**Eye Effects:** For Sodium Carbonate: rabbit: 50 mg severe  
For Edetate: Rabbit (Std Draize): 100 mg/24H, moderate

**Skin Effects:** For Edetate: Rabbit (Std Draize): 500 mg/24H, moderate

**Dermal LD50:** No data available for the product.

**Oral LD50:** For Sodium Carbonate: Rat: 4090 mg/kg  
For Urea: Rat: 8471 mg/kg

**Inhalation LC50:** For Sodium Carbonate: Rat: 2300 mg/m<sup>3</sup>/2H

**Sensitization:** No data available for the product.

**CHRONIC EFFECTS**

**Carcinogenicity:** None of the components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens.

**Mutagenicity:** Sodium Carbonate and Urea have been investigated as a mutagen. Urea has also been investigated as a tumorigen.

**Reproductive Effects:** Sodium Carbonate and Urea have been investigated as a reproductive effector.

**Developmental Effects:** No data available for the product.

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**12. ECOLOGICAL INFORMATION**

**Ecotoxicological Information:**

For Sodium Carbonate: 96 Hr LC50 Lepomis macrochirus: 300 mg/L [static]  
48 Hr EC50 Daphnia magna: 265 mg/L

For Edetate: Freshwater Fish Data: 96 Hr LC50 bluegill sunfish: 490 mg/L (Static)

**Mobility:** No data available for the product.

**Persistence and Degradability:** No data available for the product.

**Bioaccumulative Potential:** No data available for the product.

**Other Adverse Effects:** No data available for the product.

**13. DISPOSAL CONSIDERATIONS**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**14. TRANSPORT INFORMATION**

**DOT GROUND TRANSPORT**

<b>PROPER SHIPPING NAME:</b>	Not regulated.
<b>TECHNICAL NAME:</b>	NA
<b>HAZARD CLASS:</b>	NA
<b>UN/NA NUMBER:</b>	NA
<b>PACKING GROUP:</b>	NA
<b>MARINE POLLUTANT:</b>	No

**15. REGULATORY INFORMATION**

**UNITED STATES**

**29CFR 1910.1200 (OSHA):** None of the chemicals in this product are considered highly hazardous by OSHA.

**SARA SECTION 302 (40 CFR 355, APPENDIX A):** Not listed

**SECTION 311/312 HAZARD CATEGORIES (40 CFR 370):** Immediate (Acute) and Chronic Health Hazard

**SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):** Not listed

**CERCLA REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):** Not listed.

**TSCA INVENTORY STATUS (40 CFR 710):** Listed

**CALIFORNIA PROPOSITION 65:** This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

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**15. REGULATORY INFORMATION CONTINUED**

**CANADA**

**WHMIS Hazard Classification/Division:** D2B, E

**Domestic Substance List:** Listed

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**EINECS INVENTORY STATUS:** Listed or exempt from listing.

**HAZARD AND RISK PHRASE DESCRIPTIONS:**

**Hazard Symbols:** Xi (Irritant)

**Risk Phrases:** **R22** – Harmful if swallowed, **R36** - Irritating to eyes. **R41** –Risk of serious damage to eyes.

**Safety Phrases:** **S2** -Keep out of the reach of children. **S22**-Do not breathe dust. **S26** - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. **S39** - Wear eye/face protection. **S46** - If swallowed, seek medical advice immediately and show this container or label.

**16. OTHER INFORMATION**

<b>NFPA Hazard Rating:</b>	<b>Health:</b> 2	<b>4=EXTREME</b>
	<b>Flammability:</b> 0	<b>3=HIGH</b>
	<b>Reactivity:</b> 1	<b>2=MODERATE</b>
		<b>1=SLIGHT</b>

**REVISION SUMMARY:** This MSDS replace Rev 2 issued in 10/15/08. The format has been updated for compliance with various regulatory bodies. Data changes/additions are noted in the following Sections: 1-4, 7, 8, 10, 11-16.

*The information herein is given in good faith and is compiled from Material Safety Data Sheets furnished by our suppliers. No warranty, express or implied, is made or intended. Any use of this information must be determined by the user to be in accordance with applicable Federal, State, and local laws and regulations.*