

Foam Power Coil Cleaner

MSDS# SCM-712

May 2012

6 Total Pages

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Foam Power Coil Cleaner

Manufactured by: Diversitech 6650 Sugarloaf Parkway, Duluth, GA 30097 Phone: 800-995-2222 (Product Information) Phone: 800-255-3924 (CHEM-TEL, Chemical Emergencies Only) Revised: 05/25/2012 Prepared By: A. Jernigan

SECTION 2. HAZARDS IDENTIFICATION



Emergency Overview: Causes severe burns of eyes, skin, and mucous membranes.

Inhalation: Irritant/Corrosive: Effects from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or runny nose. Pneumonitis may occur. **Ingestion:** Corrosive! Swallowing may cause severe burns of mouth, throat, and stomach, severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure.

Skin Contact: Corrosive. Contact with skin can cause irritation or prolonged or repeated exposure may cause severe burns and scarring.

Eye Contact: Corrosive. Causes irritation of eyes, prolonged or repeated exposures can cause burns that may result in permanent impairment of vision, even blindness.

Chronic Exposure: Prolonged contact with dilute solutions or mists may cause tissue damage.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of this product.

3. HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO	EINECS No.	%	Hazard Symbol	Risk Phrases
Water	7732-18-5		60-80		
Potassium hydroxide	1310-58-3	215-181-3 2	10-20	С,Т, Хі	R22, 39/23/24/25, 34, 35, 36/37/38

See Section 15 for the meaning of Risk Phrases.

4. FIRST AID

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. **Ingestion:** DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Call the nearest poison control center or the National Poison Control Hotline at 1-800-222-1222 for advice.



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Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician: Perform endoscopy in all cases of suspected potassium hydroxide ingestion. In cases of severe esophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

5. FIREFIGHTING MEASURES

Explosion: May cause fire and explosions when in contact with incompatible materials.

Fire Extinguishing Media: Not considered to be a fire hazard. Use any means suitable for extinguishing surrounding fire. Special Information: Steam, mists vapors or smoke may contain potassium hydroxide. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode to minimize hazardous, corrosive or irritating exposure to smoke or steam.

6. SPILL/ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Do not flush caustic residues to the sewer. Residues from spills can be diluted with water, neutralized with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized caustic residue on clay, vermiculite or other inert substance and package in a suitable container for disposal. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of 15,000 pounds. The toll free number for the US Coast Guard National Response Center is (800) 424-8802. Remove contaminated clothing immediately. Remove unnecessary personnel from the area of the spill.

7. HANDLING AND STORAGE

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Store above 16C (60F) to prevent freezing. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do not store with aluminum or magnesium. Do not mix with acids or organic materials. Keep this and all chemicals out of the reach of children. Wash thoroughly after handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Airborne Exposure Limits:

OSHA Permissible Exposure Limit (PEL): 15 mg/m³ Ceiling (for concentrated material)

ACGIH Threshold Limit Value (TLV): 15 mg/m³ Ceiling (for concentrated material)

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, <u>Industrial Ventilation, A</u><u>Manual of Recommended Practices</u>, most recent edition, for details.

Personal Respirators (NIOSH Approved): If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest.. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.



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Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities or a source of running water in the work area.

Work Hygienic Practices: Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material, and before eating, smoking or using the toilet.

9. PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance: Clear yellow liquid Odor: Odorless Odor threshold: N/A **pH**: 13-14 Melting point/freezing point: $< 0^{\circ}C (32^{\circ}F)$ Initial boiling point and boiling range: >110°C (225°F) Flash point: Not applicable Evaporation rate (water=1): 1.1 Flammability limits %: Not applicable Vapor pressure: @20°C Vapor density: 0.62 Relative density: 1.24 Solubility: 100% soluble in water Partition Coefficient: n-octanol/water: n.a. Auto-ignition temperature: Not applicable Decomposition temperature:N/A Viscosity: 5-10cps @25°C Explosive properties: Not applicable Oxidizing properties: Not applicable N/A = Data not available

10. STABILITY and REACTIVITY DATA

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Reaction with non-ferrous metals releases flammable and explosive hydrogen gas. Hazardous Polymerization: Will not occur.

Incompatibilities: Potassium hydroxide in contact with acids and organic halogen compounds, especially trichloroethylene, may causes violent reactions. Contact with metals such as aluminum, magnesium, tin, and zinc may cause formation of flammable hydrogen gas.

Conditions to Avoid: Heat, incompatibles.

11. TOXICOLOGY INFORMATION

Data for Potassium hydroxide: 365 mg/kg oral-rat LD50. The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes This material may cause severe burns and permanent damage to any tissue with which it comes into contact. Inhalation will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis. Skin contact with this material may cause severe irritation of tissue. Eye contact can cause severe irritation, corrosion with possible corneal damage and blindness. Ingestion may cause irritation, corrosion/ulceration, nausea, and vomiting. In general, chronic effects are due to long-term irritation. This material may cause dermatitis on the skin, or recurrent corneal ulceration and visual disturbances of vision. In rare cases reports have noted long-term inhalation causes bronchial inflammatory reaction or obstructive airway dysfunction.



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12. ECOLOGICAL INFORMATION (based on potassium hydroxide)

FISH TOXICITY: This material has exhibited moderate toxicity to aquatic organisms.

FATE AND TRANSPORT: No data for mixture

BIODEGRADATION: This material is inorganic and not subject to biodegradation.

PERSISTENCE: This material is not believed to persist in the environment.

BIOCONCENTRATION: This material is not believed to bioaccumulate.

OTHER ECOLOGICAL INFORMATION: This material has exhibited slight toxicity to terrestrial organisms.

13. DISPOSAL CONSIDERATIONS

Treat empty containers as hazardous. Dispose of spill-clean up and other wastes in accordance with Federal, State, and local regulations. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. 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. TRANSPORTATION INFORMATION

US DOT: UN3266, Corrosive Liquid, Basic, Inorganic, N.O.S. (contains potassium hydroxide), 8, PGII UN Number: 3266 UN Proper Shipping Name: Corrosive Liquid, Basic, Inorganic, N.O.S. (contains potassium hydroxide) Transport Hazard Class(es): 8 Packing group: III Environmental Hazards: Not a marine pollutant ADR/RID Transport Information. ADR/RID Class 8 ADR/RID Packing Group III IMDG Hazard Class 8 IMDG Packing Group III ADNR Class 8 ADNR Item III IATA Hazard Class 8 IATA Packing Group III Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable EmS: F-A, S-B

15. REGULATORY INFORMATION



Corrosive Irritant **Risk phrases: R22:** Harmful if swallowed. **R 34:** Causes burns. **R39/23/24/25:** Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed



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R35: Causes severe burns R36/37/38: Irritating to eyes, respiratory system and skin Safety phrases S2: Keep out of reach of children S24/25: Avoid contact with skin and eyes S26: In case of contact with eves, rinse immediately with plenty of water and seek medical advice. S37/39: Wear suitable, gloves and eye/face protection. In case of swallowing, do not induce vomiting. Drink 3-4 glasses of water and call the nearest Poison Control Center or the National Poison Control Hotline at 1-800-222-1222 Federal, State & International Regulations U.S. REGULATIONS: (information based on potassium hydroxide) U.S. INVENTORY (TSCA): All components are listed on or are exempt from the inventory. TSCA 12(b) EXPORT NOTIFICATION: Not listed. CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES: 1000 LBS RQ (potassium hydroxide) SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: Not regulated. SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES): ACUTE: Yes; CHRONIC: No; FIRE: No; REACTIVE: No; SUDDEN RELEASE of Pressure: No SARA TITLE III SECTION 313: Not regulated. OSHA PROCESS SAFETY: Not regulated. CALIFORNIA PROPOSITION 65: Not regulated. NEW JERSEY WORKER AND COMMUNITY RIGHT TO KNOW: Reporting Requirement: Potassium hydroxide (1310-58-3) 10-20% Right To Know Hazardous Substance List: Potassium hydroxide (1310-58-3) 10-20% Special Health Hazard Substance List: Potassium hydroxide (1310-58-3) 10-20% PENNSYLVANIA RIGHT TO KNOW: Reporting Requirement: Potassium Hydroxide (1310-58-3) 10-20% Hazardous Substance List: Potassium hydroxide (1310-58-3) 10-20% ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST: Potassium hydroxide (1310-58-3) 10-20% SPECIAL HAZARDOUS SUBSTANCE LIST: Not regulated. CANADIAN REGULATIONS: WHMIS CLASSIFICATION: E. CANADA INVENTORY (DSL/NDSL): All components of this product are listed on the DSL. Australian Hazchem Code: 2R Poison Schedule: Not scheduled WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. **16. OTHER INFORMATION:**

NFPA/HMIS Ratings: Health: 3 Flammability: 0 Reactivity: 1 Label Hazard Warning: DANGER: CORROSIVE. POISON. Avoid contact with eyes and skin. Avoid breathing spray mists. Do not take internally. Label Precautions: Skin and eye protection should be worn when mixing and applying solutions of this product. Keep out of reach of children.



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Label First Aid: In case of contact, flush eyes or skin with cool clean running water for 15 minutes, lifting eyelids several times to irrigate the area beneath the eyelid. For eyes or if skin irritation develops, get medical attention immediately after performing first aid. In case of swallowing, do not induce vomiting. Drink 3-4 glasses of water and call the National Poison Control Hotline (1-800-222-1222) for advice.

Product Use: Air condition and refrigeration coil cleaner

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