



COSHH DATA SHEET

Pro-Universal™ Granular Coil Cleaner™

Total Pages: 4

COSHH Safety Data Sheet #: GRAN-UNIV
 Catalog #: GRAN-UNIV

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SECTION 1. PRODUCT NAME

Pro Universal™ Granular Coil Cleaner™

SECTION 2. HAZARDOUS INGREDIENTS INFORMATION

| INGREDIENT | CAS NO | OSHA PEL | ACIGH TLV | OTHER STEL | % OR RANGE |
|---------------------|-----------|----------|-----------------|------------|------------|
| Sodium Metasilicate | 6834-92-0 | 2MG/M3 | | (For dust) | 20-40 |
| Potassium Carbonate | 584-08-7 | | Not established | | 20-40 |

SECTION 3. HAZARDS IDENTIFICATION

Sodium metasilicate is strongly irritating to the skin, eyes and respiratory tract. Acute exposures involving the inhalation of dusts may result in irritation of the respiratory tract and corrosive damage may result from contact with mucous membranes. Prolonged exposures can lead to inflammatory changes and ulcerative problems in the mouth. Possible bronchial and gastrointestinal problems can occur, depending upon concentration and duration of exposure.

Inhalation: Irritant. Effects from inhalation of mists of the product solution 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: Swallowing may cause burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure. Damage may appear days after exposure.

Skin Contact: Contact with skin can cause irritation or burns and scarring with greater exposures.

Eye Contact: 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 solutions or mists may have a destructive effect on tissue.

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.

SECTION 4. FIRST AID

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Get medical attention.

Ingestion: DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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 after administering first aid.

SECTION 5. FIREFIGHTING MEASURES

This material is not considered to be a fire hazard.

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

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: 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.

Pro-Universal™ Granular Coil Cleaner™

SECTION 6. SPILL/ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Remove contaminated clothing immediately. Wear appropriate personal protective equipment as specified in Section 8. Sweep up and recover spilled material. Collect uncontaminated product for reuse or recycling when possible. Residues from spills can be diluted with water, or neutralized with a dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized residue on clay, vermiculite or other inert substance and package in a recovery drum or other suitable container for disposal. Do not use aluminum tools to collect absorbed material or aluminum containers to store collected waste. 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.

SECTION 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. 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 hands thoroughly after handling. Remove and launder contaminated clothing before re-use.

SECTION 8. EXPOSURE CONTROLS /PERSONAL PROTECTION

Airborne Exposure Limits:

OSHA Permissible Exposure Limit (PEL): 6 mg/m³ Ceiling (based on sodium metasilicate)

ACGIH Threshold Limit Value (TLV): 6 mg/m³ Ceiling (based on sodium metasilicate)

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, Industrial Ventilation, A Manual of Recommended Practices, 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.

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 eye contact hazards from granular product or solutions are 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 or smoking.

SECTION 9. PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: >225°F

Vapor pressure (mm Hg): None

Vapor Density (Air = 1): None

Solubility in water: Completely soluble

Appearance and odor: Orange granular solid with a lavender odor.

Bulk Density: 1.295gm/cc (81 pounds/ft³)

Melting Point (Pour Point): Does not apply

Evaporation Rate (Water = 1): Does not apply

pH (5% solution): 11.7-12.3

SECTION 10. STABILITY AND REACTIVITY DATA

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Carbon dioxide

Hazardous Polymerization: Will not occur.

Incompatibilities: Decomposes in high heat. In contact with acids and organic halogen compounds, especially trichloroethylene, may cause violent reactions. Granular product and its solutions release carbon dioxide on contact with acids.

Conditions to Avoid: Heat, incompatibles.

SECTION 11. TOXICOLOGY INFORMATION

Sodium metasilicate: Acute oral toxicity LD50 to rats is 1280 mg/kg as a 10% aqueous solution. Acute oral toxicity LD50 to mice is 2400 mg/kg as a 10% aqueous solution.

Skin Irritation (rabbit): Application of 0.5 mL of 10% sodium metasilicate for 4 hours caused mild irritation (primary irritation score: erythema 1.11/4; oedema 0.11/4) (ECETOC, 1995). Dogs were fed sodium silicate in their diet at a dose of 2.4 g/kg per day for 4 weeks. Polydipsia and polyuria were observed in some animals. Damage to renal tubules was observed in 15/16 dogs. A study of detergent emesis in 11 dogs by gastric intubation, found that 8 mg/kg as a 10.5% aqueous solution of a sodium silicate (SiO₂:Na₂O, 3.2:1) produced emesis in 6 minutes which continued for up to 33 minutes. (Clayton & Clayton, 1993).

SECTION 12. ECOLOGICAL INFORMATION

Fish Toxicity: This material has exhibited moderate toxicity to aquatic organisms.

Fate and Transport: No data for this mixture

Biodegradation: The inorganic components of this product are not subject to biodegradation. Organic material used in this product are believed to be 99+% biodegradable in 5 days, however no specific documentation is available.

Persistence: This material is believed to persist in the environment.

Bioconcentration: This material and its degradation byproducts are believed not to bioaccumulate.

Other Ecological Information: This material has exhibited slight toxicity to terrestrial organisms.

SECTION 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.

Pro-Universal™ Granular Coil Cleaner™

SECTION 14. TRANSPORTATION INFORMATION

Domestic highway transport

Dot Hazard Label: ORM-D in quantities less than 2.2 lb or 1 KG

Dot Description: Cleaning Compound, NOI, other than liquid

IMO

UN ID Number: UN3262

Shipping Name: Corrosive Solid, Basic, Inorganic, NOS (Sodium Metasilicate and Potassium Carbonate)

Class: 8

Packing group: III (Limited Quantity)

SECTION 15. REGULATORY INFORMATION

EINECS 229-912-9 (Sodium metasilicate)

Classification and labeling: Normalized

Hazard symbol: Xi

Labeling

Risk phrases:

R22: Harmful if swallowed.

R 34 Causes burns.

R 36 Irritating to eyes.

R 37 Irritating to respiratory system.

R 38 Irritating to skin.

Safety phrases

S2: Keep out of reach of children

S24/25: Avoid contact with skin and eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39: Wear suitable, gloves and eye/face protection.

US EPA

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release quantities of Hazardous Substances is not required for this material.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on threshold planning quantities and release reporting based on reportable quantities in 40 CFR 355 (used for SARA 302, 304, 311, and 312) is not required for quantities below 250 pounds.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This material is not subject to reporting requirements.

Toxic Substances Control Act (TSCA) Status: The ingredients of this product are on the TSCA Inventory.

State Right to Know

California Proposition 65: California SCAQMD Rule 443.1 (VOC's)

Massachusetts: Hazardous substances and extraordinarily hazardous substances must be identified.

Pennsylvania: Hazardous substances must be identified.

Chemical Inventory Status

| Ingredient | TSCA | EC | Japan | Australia | Korea | DSL | NDSL | Phil. |
|---------------------------------|------|-----|-------|-----------|-------|-----|------|-------|
| Potassium Hydroxide (1310-58-3) | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes |

Federal, State & International Regulations

| Ingredient | SARA 302 RO TPO | SARA 313 | RCRA | TSCA |
|---------------------------------|--------------------|----------|------|------|
| Potassium Hydroxide (1310-58-3) | No No | No 1000 | No | No |

Chemical Weapons Convention: No

TSCA 12(b): No CDTA: No

SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: Yes (Mixture / Liquid)

SECTION 16. OTHER INFORMATION

16. OTHER INFORMATION:

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 1

Label Hazard Warning: Caution –contains concentrated inhibited alkaline hydroxides. Avoid contact with eyes and skin. Use protective gloves, glasses and clothing when mixing or applying solution. 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.

Label First Aid: For accidental eye contact, flush with water and get medical attention. For skin contact, flush with water and apply soothing lotion.

Product Use: Air condition and refrigeration coil cleaner

SECTION 17. ADDITIONAL INFORMATION:

This information is provided in accordance with the requirements of the UK Health and Safety at Work Act 1974, and specifically in order to assist users of the product to make their 'assessment of health risks' as required by the UK Control of Substances Hazardous to Health Regulation 1988 (COSHH assessments). Provision of this information does not preclude users from seeking advice from other sources as indicated in the COSHH guides. This information is intended to cover potential hazards at the place of work and does not detail medical uses, indications, contraindications and precautions for the treatment of patients.

SECTION 18. MANUFACTURER:

Specialty Chemical Manufacturing

A DiversiTech Company

1633-B High Bridge Road

Quincy, FL 32351

Phone: 0115 900 5858

EMERGENCY Phone No.: Chem-Tel Emergency Response: +1 813 248 0585

Pro-Universal™ Granular Coil Cleaner™

SECTION 19. REFERENCE NUMBER:

Date of Issue: 20/02/2008

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