SAFETY DATA SHEET

1. Identification

Product Identifier	**Coil Foam**
Other means of identification	
Product code	EI-6160
Recommended use	Foaming carbon soil remover.
Recommended restrictions	Professional use only. Use as directed
Manufacturer/supplier/distributor/importer information	
Company name	**Empire Industries**
Address	P.O. Box 1404 Brentwood, TN 37024
Telephone	(615) 315-0026
FAX	(615) 315-0035
Emergency phone number	PERS 24-hour Emergency (800) 633-8253

2. Hazard(s) Identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity	Category 4
	Serious eye damage	Category 1
	Skin corrosion	Category 1B
Environmental hazards	Not classified.	
OSHA defined hazards	Not listed.	
Label elements		

Signal word	**DANGER**
Hazard statement	May be harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Do not breathe dusts or mists. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	Call a POISON CENTER/doctor/medical professional if you feel unwell. **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting. If vomiting occurs keep head low to prevent stomach contents entering the lungs **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin thoroughly with water/shower. Wash contaminated clothing before reuse. **IF INHALED:** Remove person to fresh air and keep comfortable breathing. Immediately call a POISON CENTER/doctor/medical professional. Specific treatment (see Section 4 on the Safety Data Sheet). **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contact a physician or poison control center immediately.
Storage	Store locked up. Keep container tightly closed except when in use. Store in corrosion resistant container with resistant liner. Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)	None.
Supplemental information	None.

3. Composition/information on ingredients

Mixture Component(s)		
Chemical name	**CAS number**	**%**
Potassium hydroxide	1310-58-3	5-10
2-butoxyethanol	111-76-2	1-5
Sodium lauryl ether sulfate	68585-34-2	1-5
Sodium xylene sulfonate	1300-72-7	1-5
Other components below reportable levels		75-91

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact	Rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention. Eye wash stations should be located in work area.
Ingestion	Rinse mouth. Get medical attention if symptoms occur. Do not induce vomiting.
Most important symptoms/effects, acute and delayed	Chemical burn or rash on exposed skin. May cause an allergic skin reaction. Pain, swelling excessive tearing and redness of the eye. Burning sensation and irritation of mucous membranes of the nose and upper respiratory tract.
Indication of immediate medical attention and special treatment needed	Provide general support measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO_2)
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protecting clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted. This product does contain very small amounts of components that can generate flammable vapors in confined areas or if heated.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate protective equipment and clothing during clean-up. Wear eye/face protection.

Methods and materials for containment and cleaning up	Caution – spillages may be slippery. Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Small spills: Wipe up with absorbent material (e.g. cloth, absorbent wipes). Clean surface thoroughly with dilute vinegar or other mildly acidic solution to remove residual contamination. Never return spills to original container for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Do not release into the open environment (see section 12). Avoid discharge into surface drainage paths and other areas not consistent with package labeling.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly-closed container. Do not store in extreme temperature conditions. Do not store with strong acids.

8. Exposure controls/personal protection

Occupational exposure limits

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-butoxyethanol	PEL	50 ppm
Potassium hydroxide	PEL	2 mg/m^3
Ethanol	PEL	1,000 ppm

US ACGIH Threshold Limit Values

Components	Type	Value
2-butoxyethanol	STEL	20 ppm
Potassium hydroxide	STEL	2 mg/m^3
Ethanol	STEL	1,000 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Species	Sampling Time
2-butoxyethanol	200 mg/g	Creatinine	Urine	End of shift.

Appropriate engineering controls	Emergency eye wash stations and showers should be readily accessible. Provide natural or mechanical ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection	Avoid contact with eyes. Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of

	several substances, the protection time of the gloves cannot be accurately estimated. Suggested protective materials: Nitrile and PVC rubber.
Other	Wear long sleeve shirts with full-length pants.
Respiratory protection	Respiratory protection not required for prescribed use of this product. In the event of insufficient ventilation, wear NIOSH-approved respiratory protection equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke or use chewing tobacco. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	
Physical State	Liquid
Color	Colorless
Odor	Mild citrus/aromatic fragrance
Odor threshold	Not available.
pH	13-14
Melting/freezing point	Not available.
Initial boiling point and boiling range	>212°F (100°C)
Flash point	>385°F (196°C)
Evaporation rate	Not available.
Flammability	Not available.
Flammability Limits	
Upper	Not available.
Lower	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity (water=1)	1.07
Solubility in water	Miscible.
Partition coefficient (n-octanol/water)	<0.81 (Estimated from literature)
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	This product is stable and non-reactive under normal conditions of use.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames can cause product to decompose.
Incompatible materials	Strong acids, strong oxidizing agents.
Hazardous decomposition products	Aldehydes, ketones, organic acids, carbon dioxide, carbon monoxide, sulfur oxides

11. Toxicological information

Information on likely routes of exposure	
Ingestion	Corrosive to mucous membranes, will damage tissue if there is prolonged contact.
Inhalation	Expected to be a low inhalation hazard.
Skin contact	Repeated and/or prolonged skin contact will cause burns.
Eye contact	Causes severe eye damage. May cause severe corneal injury.
Symptoms related to the physical, chemical and toxicological characteristics	Dermatitis. Rash. May cause an allergic skin reaction. Pain, swelling excessive tearing and redness of the eye.
Acute toxicity	May be harmful if swallowed.

Product Coil Foam (CAS mixture)		
Exposure Classification	**Route and Species**	**LD_{50}**
Acute	*Oral*, rat	>4,050 mg/kg (Estimated)
Acute	*Dermal*, rabbit	>2,600 mg/kg (Literature)
Acute	Inhalation, rat	>6.7 mg/m^3 (Literature)
*Estimates for product may be based on additional component data not shown		

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/ irritation	Causes serious eye damage.
Respiratory sensitization	Not classified.
Skin sensitization	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not considered a carcinogen.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not Listed.
Reproductive toxicity	Not classified.
Specific target organ toxicity – single exposure	Not classified.
Specific target organ toxicity – repeated exposure	Not classified.
Aspiration hazard	Not considered an aspiration hazard.

12. Ecological information

Ecotoxicity		
Product Coil Foam (CAS mixture)		
Aquatic	**Species**	**Test Results**
Crustacea	Daphnia magna	EC_{50}(48-hr): >700 mg/L (Estimated from literature)
Fish	Fathead minnow (*Pimephales promelas)*	LC_{50}(96-hr): >1,250 mg/L (Estimated from literature)
Fish	*Mosquito fish (Menidia beryllina)*	LC_{50} (96-hr): >1,240 mg/L (Estimated from literature)
*Estimates for product may be based on additional component data not shown		
The ability of this product to alter pH of aquatic systems is defined. Avoid spillage or discharge of un-treated effluent to sewers or surface drainage paths. Severe short-term impact to aquatic systems can be expected if significant quantities are released		

Persistence and degradability	No data available. Chemicals of this class are not expected to be persistent in an open, aerobic environment
Bio=accumulative potential	No data available.
Mobility in soil	Not available. Chemicals of these classes are highly water soluble and will partition readily to water and weakly to particles in low-clay soil matrices. A listed component is inorganic and highly water-soluble. In aqueous medium, the listed chemical(s) will readily

	dissociate into ionic molecules that will be weakly adsorbed onto organic matter particles. They are expected to exhibit moderate to high mobility in saturated and semi-saturated soils
Other adverse effects	The pH of this product may cause it to be toxic to aquatic and terrestrial organisms. No other adverse environmental effects known (*i.e. ozone depleting substance, tropospheric ozone precursor, greenhouse gas emission, endocrine disruptor or other deleterious environmental effect*)

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Do not release to the environment.
Local disposal regulations	Dispose in accordance with all applicable regulations. As packaged, this product may meet criteria defining RCRA corrosive (D002) hazardous wastes when disposed. (40 CFR Part 261, Subpart C). Before selecting disposal method, ensure that the waste materials have been properly assessed and, as necessary, tested to confirm regulatory status.
Waste from residues/unused product	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. (See: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may contain product residue, follow label warnings even after container is emptied.

14. Transport information

USDOT

UN number	UN1760
UN proper shipping name	Corrosive Liquids, n.o.s. (Contains: Potassium hydroxide)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packaging group	II
Marine pollutant	No
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not intended to be transported in bulk.

DOT Label/Placard

15. Regulatory information

US federal regulations .

SARA 302 Extremely hazardous substance Not listed.
SARA 304 Emergency release notification Not listed.
SARA 311/312 Hazard Categories
Immediate Hazard - Yes
Delayed Hazard – No
Fire Hazard – No
Pressure Hazard – No
Reactivity Hazard – No
SARA 313 (TRI reporting) 2-butoxyethanol (Glycol Ether Category)

California Proposition 65 **California Safe Drinking Water and Toxic Enforcement Act of 1986**
This product 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 threshold determination and Safe Harbor notification (1/2020)

16. Other information, including date of preparation or last revision

Issue date 4/16/2020
Revision date
Version # 1
HMIS® ratings Health: 2
Flammability: 1
Physical hazard: 0

NFPA ratings Health: 2
Flammability: 1
Instability: 0

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, and have been obtained from resources believed to be reliable. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information related only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified by the text.
Revision information First issue.