SAFETY DATA SHEET

 $\textbf{Date Prepared:}\ 1/15/2015$

SDS No: LF6

Lock & Fill High Performance Degreaser

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Lock & Fill High Performance Degreaser **GENERAL USE:** Cleaner/degreaser for heavy industrial soils. **PRODUCT DESCRIPTION:** High Performance Degreaser

PRODUCT CODE: LF6

CHEMICAL FAMILY: Solvent/alkali/detergent blend

MANUFACTURER

MISCO Products Corporation 1048 Stinson Drive Reading, PA 19605

Emergency Phone: 610-926-4106 **Customer Service:** 800-548-4568 **Transportation:** 800-548-4568

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEM-TEL (Medical and Transportation): 800-255-3924 POISON CONTROL CENTER (Medical): 800-222-1222

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2A
Eye Corrosion, Category 1
Acute Toxicity (Oral), Category 4

Physical:

Corrosive to Metals, Category 1

GHS LABEL



Corrosion



Exclamation mark

SIGNAL WORD: DANGER HAZARD STATEMENTS

H318: Causes serious eye damage.

H315: Causes skin irritation.

H302: Harmful if swallowed.

H290: May be corrosive to metals.

PRECAUTIONARY STATEMENT(S)

Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P264: Wash thoroughly after handling.

P270: Do no eat, drink or smoke when using this product.

P234: Keep only in original container.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with local, state and federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Purple liquid.

IMMEDIATE CONCERNS: Causes irreversible eye damage and skin burns.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive, contact causes severe eye burns.

SKIN: Contact causes severe skin irritation and possible burns.

INGESTION: Harmful if swallowed.

INHALATION: Mist is irritating to nose, throat and lungs.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: None known.

CARCINOGENICITY: Not Established

MUTAGENICITY: None known.

ROUTES OF ENTRY: Eye, skin, ingestion.
WARNING CAUTION LABELS: Corrosive
PHYSICAL HAZARDS: None Expected.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Sodium Silicate	0 - 5	6834-92-0
Potassium Hydroxide	0 - 5	1310-58-3
Nonylphenol Ethoxylate	5 - 10	9016-45-9
Polyethylene glycol (octylphenyl) ether Phosphate	0 - 5	52623-95-7
Monoethanolamine	0 - 5	141-43-5
Dipropylene glycol monomethyl ether	10 - 15	34590-94-8
Ethylene glycol butyl ether	0 - 5	111-76-2
Dye	< 0.1	N/A
Water	70 - 80	7732-18-5

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

SKIN: Remove contaminated clothing. Immediately flush with water followed by washing with mild soap. Seek medical attention.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Severe burning sensation, damage marked by burns.

SKIN: Burning sensation, redness.

INGESTION: Irritation of mouth, throat, along with stomach upset, vomiting.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing. **ACUTE TOXICITY:** Corrosive to eyes. Causes moderate to severe skin irritation. Harmful if swallowed.

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: None

EXTINGUISHING MEDIA: Use an extinguishing agent suitable for the surrounding fire.

EXPLOSION HAZARDS: Fire exposed containers may burst due to increased pressure from heat. **FIRE FIGHTING PROCEDURES:** Keep fire exposed containers cool with water stream or mist.

FIRE FIGHTING EQUIPMENT: Not Established

HAZARDOUS DECOMPOSITION PRODUCTS: Not Established

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid discharges into open waterways.

LAND SPILL: Avoid discharge to soil. **AIR SPILL:** NA = Not Applicable

GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.

SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Close container after use.

HANDLING: Avoid contact with skin and eyes. Wash hands before eating, drinking, smoking or using toilet facilities.

STORAGE: Store in closed container in an area inaccessible to children.

STORAGE TEMPERATURE: Store at ambient temperatures. **STORAGE PRESSURE:** Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSH	A PEL	ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m³	ppm	mg/m³	ppm	mg/m³
Potassium Hydroxide	TWA		2 mg/m3				
	STEL				2 mg/m3		
Monoethanolamine	TWA	3	6	3	7.5	NL	NL
	STEL			6	15	NL	NL
Dipropylene glycol monomethyl ether	TWA	100	600	100	606		
	STEL			150	909		
Ethylene glycol butyl ether	TWA	50	240	20	97	NL	NL
	STEL					NL	NL

ENGINEERING CONTROLS: No special requirements.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash googles and full face-shield.

SKIN: Rubber or other chemical resistant gloves.

RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.

PROTECTIVE CLOTHING: Chemical resistant outerwear (tyvek) if contact with spray or mist is anticipated.

WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid ODOR: Characteristic.

ODOR THRESHOLD: Not Established

COLOR: Dark Purple **pH:** 13.0 to 14.0

PERCENT VOLATILE: >80

FLASH POINT AND METHOD: None

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: NA = Not Applicable

VAPOR PRESSURE: ~ 20 mm Hg at (68°F)

VAPOR DENSITY: ~ 1 Air = 1 BOILING POINT: 212° F; 100° C FREEZING POINT: 32° F; 0° C

THERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: Complete **EVAPORATION RATE:** (Water =1) 1.0

DENSITY: 8.64

SPECIFIC GRAVITY: ~ 1.035 grams/ml.

VISCOSITY: Slightly viscous. **(VOC):** 18.850 % by weight

10. STABILITY AND REACTIVITY

REACTIVITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

INCOMPATIBLE MATERIALS: Strong acids, oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Sodium Silicate	1500 to 3200 mg/kg (rat)		
Potassium Hydroxide	273 mg/kg (rat)	N/A	
Nonylphenol Ethoxylate	16000 mg/kg (rat)	4490 mg/kg (rabbit)	
Monoethanolamine	1089 mg/kg (rat)	2504 mg/kg (rabbit)	~ 1.48 mg/l
Dipropylene glycol monomethyl ether	> 5000 mg/kg (rat)	9510 mg/kg (rabbit)	
Ethylene glycol butyl ether	1300 mg/kg (rat)	> 2000 mg/kg (rabbit)	> 3.1 mg/l

EYES: Not Established

DERMAL LD₅₀: Not Established **ORAL LD**₅₀: Not Established

INHALATION LC₅₀: Not Established

EYE EFFECTS: Corrosive to eyes. Permanent damage may occur.

SKIN EFFECTS: Corrosive to skin.

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
Ethylene glycol butyl ether	No listed substance	Group 3 - Not classifiable as to its carcinogenicity to Humans	No listed substance

IARC:

The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of 2-butoxyethanol in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans).

IRRITATION: Irritant
CORROSIVITY: Corrosive

GENETIC EFFECTS: No known significant effects or critical hazards.

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.

TARGET ORGANS: No known significant effects or critical hazards.

MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established

ECOTOXICOLOGICAL INFORMATION: This material may be toxic to aquatic life.

AQUATIC TOXICITY (ACUTE): Not Established

CHEMICAL FATE INFORMATION: This product is biodegradable.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If discarded, this material and its containers should be treated as hazardous waste based on the characteristics of corrosivity as defined under federal RCRA regulations (40 CFR 261). Consult local authorities for disposal into public sewer.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: Any method in accordance with local, state, and federal laws. Best method is to recycle or reuse for intended purpose.

EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Compound, Cleaning Liquid

TECHNICAL NAME: Potassium Hydroxide Solution

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: 1760
PACKING GROUP: III
PLACARDS: Corrosive

LABEL: Certain package sizes determine the proper labeling of containers. Consult manufacturer for specific information regarding proper labeling.

OTHER SHIPPING INFORMATION: Certain shipping modes and packaging sizes may have exceptions from the transport regulations. The classifications/information provided above may not reflect applicable exceptions. Contact the manufacturer for more specific information on the proper shipping of this material.

U.S. CUSTOMS HARMONIZATION NUMBER: 3402.90.10.00

AIR (ICAO/IATA)

SHIPPING NAME: Contact manufacturer for more information.

VESSEL (IMO/IMDG)

SHIPPING NAME: Contact manufacturer for more information.

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION





Limited Quantity Ground

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health - Acute

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: No

313 REPORTABLE INGREDIENTS: No listed substance

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Ethylene glycol butyl ether	0 - 5	111-76-2

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not Established

Chemical Name	Wt.%	CERCLA RQ
Potassium Hydroxide	0 - 5	1,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Sodium Silicate	Pennsylvania Right to Know Substance New Jersey Right To Know Substance
Potassium Hydroxide	Massachusetts Right to Know Substance Pennsylvania Right to Know Substance New Jersey Right To Know Substance
Nonylphenol Ethoxylate	Massachusetts Right to Know Substance New Jersey Right To Know Substance Pennsylvania Right to Know Substance
Monoethanolamine	Massachusetts Right to Know Substance New Jersey Right To Know Substance New York Right to Know Substance Pennsylvania Right to Know Substance
Dipropylene glycol monomethyl ether	Massachusetts Right to Know Substance New Jersey Right To Know Substance Pennsylvania Right to Know Substance
Ethylene glycol butyl ether	Massachusetts Right to Know Substance Pennsylvania Right to Know Substance New Jersey Right To Know Substance

CALIFORNIA PROPOSITION 65: No listed substance

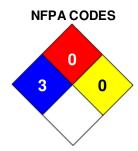
CARCINOGEN:

The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of 2-butoxyethanol in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans).

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department Date Prepared: 1/15/2015

HMIS RATING HEALTH 3 FLAMMABILITY 0 PHYSICAL HAZARD 0 PERSONAL PROTECTION D



MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.