

Corrosion Technologies  
2850 Industrial Ln  
Garland, TX 75041  
(972) 271-7361 Fax: (972) 278-9721

# BOOT KLEAN™

## Safety Data Sheet

### 1. IDENTIFICATION

**Product Name:** BOOT KLEAN™  
**Product Numbers:** 85208, 85500, 85505  
**Product Type and Use:** Aqueous alkaline cleaner / degreaser  
**Manufacturer:** Corrosion Technologies  
2850 Industrial Ln, Garland, TX 75041  
**Contact:** Telephone: 972-271-7361 Fax: 972-278-9721  
**Emergency Telephone:** CHEMTREC® USA (800) 424-9300  
Outside US +1 (703) 527-3887

### 2. HAZARDS IDENTIFICATION

#### Hazard Classification

##### Health Hazard(s)

Skin Corrosion/Irritation Category 1C  
Eye Irritation Category 1  
Acute Toxicity - Inhalation Category 4  
Acute Toxicity - Oral Category 4  
STOT-SE Category 3

##### Physical Hazard(s)

Corrosive to metals Category 1

##### Hazard(s) not otherwise classified

None

#### Labeling

**Signal Word:**

**DANGER**

**Pictograms:**

Corrosion, Exclamation



#### Statements of Hazard

##### Hazard Statements

Causes severe skin burns and eye damage  
Harmful if inhaled or swallowed  
May cause respiratory irritation  
May be corrosive to metals

##### Precautionary Statements

Wear protective gloves, eye and face protection. Do not breathe vapors or mist. Use only outdoors or in a well-ventilated area. Take off contaminated clothing and wash it before reuse. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Store locked up in a well ventilated place. Keep only in original container. Absorb spillage to prevent material damage. Store in corrosive-resistant container with resistant inner liner. Dispose of contents and container in accordance with applicable regulations.  
If on skin: Rinse skin with water or shower. Immediately call a poison center or doctor.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.  
If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor.  
If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Percent by Wt.
2-butoxyethanol	111-76-2	10-15*
Monoethanolamine	141-43-5	10-15*

\* Exact percentage of composition has been withheld as a trade secret

### 4. FIRST AID MEASURES

**General Advice:** Causes skin and eye damage. May be absorbed through the skin; avoid contact. Do not swallow. Avoid breathing vapor or mist. Use with adequate ventilation. Keep container closed.

**Inhalation:** Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor.

**Skin Contact:** Remove contaminated clothing. Flush skin with plenty of water. Remove contaminated clothing and wash before reuse. Immediately call a poison center or doctor.

**Eye Contact:** Immediately flush cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

**Ingestion:** Do not give anything by mouth to an unconscious person. Do not induce vomiting unless advised to do so by a doctor or poison control center. Rinse mouth. Immediately call a poison center or doctor.

### 5. FIRE FIGHTING MEASURES

**Extinguishing Media:** Product does not support combustion. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Suitable:** Carbon Dioxide, Dry Chemical and Foam

**Unsuitable:** Alcohol, Alcohol based solutions

**Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus, pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool fire-exposed containers with water spray.

**Unusual Fire and Explosion Hazards:** None known.

**Hazardous Combustion/ Decomposition Products:** Oxides of carbon, phosphorous and nitrogen.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions / Protective Equipment / Emergency Procedures:** Use caution as spills may be slippery. Ensure adequate ventilation. Use personal protective equipment.

**Methods and materials for containment and cleaning up:** Small spills of one gallon or less may be flushed with plenty of water to sanitary sewer system (If permitted by local sewer regulations). Dike and contain large spills with inert absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer liquid to plastic containers. Do not store or dispense into metal containers; especially aluminum. Use clean non-sparking tools to collect absorbed material and transfer to a properly labeled container for recovery or disposal according to applicable regulations.

## 7. HANDLING AND STORAGE

### HANDLING

**Precautions for Safe Handling:** Avoid skin and eye contact. Use with adequate ventilation. Avoid breathing vapor and mist. Follow all SDS/label precautions.

### STORAGE

**Conditions to avoid:** Store in a cool, dry, well-ventilated place in the original container. Separate from acids, reactive metals, and ammonium salts. Do not store or transfer in aluminum, fiberglass, copper, brass, zinc or galvanized containers. Keep container tightly closed when not in use. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE LIMITS:** The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Component	ACGIH		OSHA		STEL ppm	STEL mg/m3
	TLV ppm	TLV mg/m3	PEL ppm	PEL mg/m3		
2-butoxyethanol	20 (Skin)	Not Est.	50	240	Not Est.	Not Est.
Monoethanolamine	3	Not Est.	3	6	6	15

**Engineering Controls:** Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

### Personal Protection

**Respiratory Protection:** None required under normal use conditions. In case of insufficient ventilation, wear a suitable NIOSH approved air purifying respirator.

**Hand / Skin Protection:** Wear impermeable gloves such as neoprene or nitrile rubber gloves. Gauntlets and apron may be worn depending on the extent of exposure.

**Eye / Face Protection:** Face shield with safety glasses with side-shields.

**General Hygiene Measures:** Avoid contact. Always wash hands and face before eating, drinking or smoking. Remove and wash contaminated clothing before re-use. An eyewash station and washing facilities should be readily accessible to the area of use. See 29 CFR 1910.132-138 for further guidance.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Translucent	<b>Volatile by volume (%):</b>	75
<b>Physical State:</b>	Viscous liquid	<b>Vapor Density (Air=1):</b>	1
<b>Odor:</b>	Fishy	<b>Evaporation Rate (BuAc= 1):</b>	<1
<b>Color:</b>	Water white	<b>Vapor Pressure, mmHg @23°C:</b>	21.1
<b>Viscosity, cSt @ 40°C:</b>	Not established	<b>Solubility in water:</b>	Complete
<b>cSt @ 100°C:</b>	Not established	<b>Octanol/Water Partition (log Pow)</b>	
<b>pH:</b>	11	2-butoxyethanol	0.81
<b>Boiling Point/ Range:</b>	>200 °F / 93 °C	Monoethanolamine	-2.3
<b>Melting Point:</b>	>32 °F / 0 °C	<b>VOC Content (g/L)(%):</b>	0
<b>Flash Point:</b>	Non-flammable	<b>Specific Gravity @15.6 °C:</b>	1.002
<b>Method:</b>	Not applicable	<b>Pour Point:</b>	>32 °F / 0 °C
<b>Lower Explosive Limit, vol %:</b>	3.4 MEA	<b>Non-volatile by Volume (%):</b>	25
<b>Upper Explosive Limit, vol %:</b>	Not established	<b>Dielectric Strength:</b>	Not applicable
<b>Autoignition Temperature:</b>	424 °C		

## 10. STABILITY AND REACTIVITY

**Stability:** Stable at ambient temperatures.

**Conditions to Avoid:** None known

**Hazardous Polymerization:** Will not occur.

**Materials to Avoid:** Strong oxidizing agents, acids and reactive metals such as aluminum, magnesium, copper, brass, zinc or galvanized metal. Do not mix with nitrosating agents like sodium nitrate as it can form carcinogenic nitrosamines.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information:** Not established

### Ingredient Information

2-butoxyethanol: Ori-Rat LD50 470 mg/kg, Skn-Rbt LD50 220 mg/kg, Ihl-Rat LC50 450 ppm 4 h

Monoethanolamine: Ori-Rat LD50: 1,515-1,720 mg/kg, Ihl-Rat LD50: >1.3 mg/L 6 h, Skn-Rbt LD50: 1,025 mg/kg

### Acute Effects

**Signs and Symptoms of Overexposure:** Skin and serious eye irritation, Coughing, Sneezing

**Inhalation:** Vapor and mist may cause respiratory irritation with nasal discomfort and discharge, coughing and sneezing.

**Skin Contact:** May cause redness and itching. May be absorbed through skin in harmful amounts.

**Eye Contact:** May cause stinging, tearing, redness, and pain. May cause blindness.

**Ingestion:** May cause nausea, vomiting and diarrhea.  
**Primary Route(s) of Exposure:** Eyes, Skin, Inhalation  
**Primary Route(s) of Entry:** Inhalation, Ingestion  
**Target Organs:** Liver, kidneys, lymphatic system, skin, blood, eyes, central nervous system and respiratory system  
**Chronic Effects**  
2-butoxyethanol target organ effects: liver, kidneys, lymphatic system, skin, blood, eyes, CNS and respiratory system  
Monoethanolamine: Liver, kidneys and respiratory system  
**Carcinogenicity:** 2-butoxyethanol: ACGIH A3; IARC Group 3; Not classifiable as to its carcinogenicity to humans.  
**Medical Conditions Aggravated by Exposure:** May aggravate existing skin, eye and respiratory conditions including asthma and dermatitis.

## 12. ECOLOGICAL INFORMATION

**Product Data:** Not established

### Ingredient Data

2-butoxyethanol: Toxicity to Fish LC50 = 1490 mg/L *Lepomis macrochirus* 96 h, Water Flea EC50 1698 - 1940 mg/L 24 h *Daphnia magna*, 1000 mg/L 48 h *Daphnia magna*  
Monoethanolamine: Toxicity to Algae EC50 = 15 mg/L *Desmodesmus subspicatus* 72 h, Toxicity to Fish LC50 114 - 196 mg/L *Oncorhynchus mykiss* 96 h LC50 300 - 1000 mg/L *Lepomis macrochirus* 96 h LC50 = 227 mg/L *Pimephales promelas* 96 h LC50 = 3684 mg/L *Brachydanio rerio* 96 h LC50 > 200 mg/L *Oncorhynchus mykiss* 96 h, Microtox EC50 = 110 mg/L 17 h EC50 = 12200 mg/L 2 h EC50 = 13.7 mg/L 30 min, Water Flea EC50: *Daphnia magna* 65mg/L 48 h  
**Elimination Information:** 2-butoxyethanol: log Kow 0.81; Monoethanolamine: Readily biodegradable, log Kow -2.3

## 13. DISPOSAL CONSIDERATIONS

**Product:** Dispose of contents and container in accordance with applicable regulations.

**Container:** Empty remaining contents. Empty containers should be taken for local recycling, recovery or waste disposal.

## 14. TRANSPORT INFORMATION

### Road Transport

**Proper Shipping Name:** Amines, liquid, corrosive, n.o.s. (Ethanolamine)

**UN-No:** UN2735

**Class:** 8

**Packing Group:** III

### Sea Transport

**Proper Shipping Name:** Amines, liquid, corrosive, n.o.s. (Ethanolamine)

**Class:** 8

**UN-No:** UN2735

**Packing Group:** III

**EmS No.** F-A, S-B

### Air Transport

**Proper Shipping Name:** Amines, liquid, corrosive, n.o.s. (Ethanolamine)

**Class:** 8

**UN-No** UN2735

**Packing Group:** III

**ERG Code** 8L

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

**Toxic Substances Control Act (TSCA):** All components are included on the Inventory

**Superfund Amendments and Reauthorization Act (SARA) Title III:**

Immediate Hazard	Delayed Hazard	Fire Hazard	Pressure Hazard	Reactivity Hazard
X	X	-	-	-

## 16. OTHER INFORMATION

**Prepared by:** Corrosion Technologies, Technical Services Department

**Revision Date:** 6/10/2024

**Supersedes Date:** 9/29/2020

**Revision Indicator:** v 2.2

National Fire Protection Association (704)

Health: 2

Flammability: 1

Reactivity: 0

Other: -

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results and assume no liability for damage incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical and application of such products is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the sole responsibility of the user to comply with all applicable Federal, State and Local Laws and Regulations. Any questions with regards to information contained herein should be referred to: U. S. Corrosion Technologies, LLC (972) 271-7361.