

Safety Data Sheet

Issue Date: 01-Jun-1990

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Version 1

1. IDENTIFICATION

Product Identifier

Product Name CHALLENGE DEGREASER

Other means of identification

SDS # CTI-055

UN/ID No UN1760

Recommended use of the chemical and restrictions on use

Recommended Use Heavy duty floor cleaner and degreaser.

Details of the supplier of the safety data sheet

Supplier Address

Chemtron Incorporated
7350 C Lockport Place
Lorton, Virginia 22079

Emergency Telephone Number

Company Phone Number Information: 703-550-7772

Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Appearance Clear green liquid

Physical State Liquid

Odor Slight Pine

Classification

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a poison center or doctor/physician

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/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a poison center or doctor/physician

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Monoethanolamine	141-43-5	5-10
Ethylene Glycol Monobutyl Ether	111-76-2	<5
Sodium metasilicate	6834-92-0	<5
Caustic Soda	1310-73-2	<5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediately call a poison center or doctor/physician.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before reuse. Call a poison control center or doctor for treatment advice.
Inhalation	Remove to fresh air. Call a physician or poison control center immediately.
Ingestion	Rinse mouth. Drink 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

Symptoms	Causes severe skin burns and eye damage. Inhalation may cause irritation of nasal passages and respiratory tract. Ingestion may result in mucosal damage.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable.

Hazardous Combustion Products Carbon dioxide (CO₂).

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Absorb with inert material or sweep up, and then place in suitable container for chemical waste. Rinse area thoroughly. Absorb rinsate with appropriate absorbent and transfer this material to a properly labeled container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. This is an industrial cleaning compound. Do not mix with anything but water. Do not breathe vapors or spray mist. Wash face, hands, and any exposed skin thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store at elevated temperatures. To insure maximum shelf life, store at a normal room temperature. Store locked up. Store away from incompatible materials.

Incompatible Materials Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Monoethanolamine 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³
Ethylene Glycol Monobutyl Ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Sodium metasilicate 6834-92-0	2 mg/m ³	2 mg/m ³	-
Caustic Soda 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Goggles.

Skin and Body Protection Rubber, neoprene, or other impervious gloves are recommended to prevent skin contact.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Slight Pine
Appearance	Clear green liquid	Odor Threshold	Not determined
Color	Clear green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	14	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	None	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-Not Applicable	
Upper Flammability Limits	None	
Lower Flammability Limit	None	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	1.06	
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	

Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Contact with incompatible materials. Keep out of reach of children.

Incompatible Materials

Strong acids. Strong oxidizing agents.

Hazardous Decomposition Products

Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	The information below is for repeated and prolonged contact in an occupational setting. It does not apply to normal product use
Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Monoethanolamine 141-43-5	= 1720 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 1025 mg/kg (Rabbit)	-
Ethylene Glycol Monobutyl Ether 111-76-2	= 470 mg/kg (Rat)	= 2270 mg/kg (Rat) = 220 mg/kg (Rabbit)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h
Sodium metasilicate 6834-92-0	= 600 mg/kg (Rat)	-	-
Caustic Soda 1310-73-2	-	= 1350 mg/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms	Please see section 4 of this SDS for symptoms.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure**Carcinogenicity**

Not classifiable as a human carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethylene Glycol Monobutyl Ether 111-76-2	A3	Group 3		

Legend**ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Monoethanolamine 141-43-5	15: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	227: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 3684: 96 h <i>Brachydanio rerio</i> mg/L LC50 static 300 - 1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 114 - 196: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 200: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through		65: 48 h <i>Daphnia magna</i> mg/L EC50
Ethylene Glycol Monobutyl Ether 111-76-2		1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50		1698 - 1940: 24 h <i>Daphnia magna</i> mg/L EC50 1000: 48 h <i>Daphnia magna</i> mg/L EC50
Sodium metasilicate 6834-92-0		210: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static 210: 96 h <i>Brachydanio rerio</i> mg/L LC50		216: 96 h <i>Daphnia magna</i> mg/L EC50
Caustic Soda 1310-73-2		45.4: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Monoethanolamine 141-43-5	-1.91
Ethylene Glycol Monobutyl Ether 111-76-2	0.81

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Caustic Soda 1310-73-2	Toxic Corrosive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Sodium hydroxide)
Hazard Class 8
Packing Group II

IATA

UN/ID No UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Sodium hydroxide)
Hazard Class 8
Packing Group II

IMDG

UN/ID No UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Sodium hydroxide)
Hazard Class 8
Packing Group II
Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Monoethanolamine	Present	X		Present		Present	X	Present	X	X
Ethylene Glycol Monobutyl Ether	Present	X		Present		Present	X	Present	X	X
Sodium metasilicate	Present	X		Present		Present	X	Present	X	X
Caustic Soda	Present	X		Present		Present	X	Present	X	X

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

US Federal Regulations**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Caustic Soda 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylene Glycol Monobutyl Ether - 111-76-2	111-76-2	<5	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Caustic Soda	1000 lb			X

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Monoethanolamine 141-43-5	X	X	X
Ethylene Glycol Monobutyl Ether 111-76-2	X	X	X
Caustic Soda 1310-73-2	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards**

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS**Health Hazards**

3

Flammability

0

Physical Hazards

0

Personal Protection

Not determined

Issue Date:

01-Jun-1990

Revision Date:

11-Mar-2015

Revision Note:

New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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 relates 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 in the text.

End of Safety Data Sheet