



Safety Data Sheet

Issue Date: 11-May-2011

Revision Date: 17-Nov-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Cleaner 4

Other means of identification

SDS # CS-005

UN/ID No NA1760

Recommended use of the chemical and restrictions on use

Recommended Use Cleaning agent.

Details of the supplier of the safety data sheet

Supplier Address

Cross Systems Inc.
1012 North Main St.
Roxboro, NC 27573

Emergency Telephone Number

Company Phone Number 336-598-5504
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Brown liquid

Physical State Liquid

Odor Sweet

Classification

Skin corrosion/irritation	Category 1 Sub-category C
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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Caustic Soda	1310-73-2	5
Ethylene Glycol Monobutyl Ether	111-76-2	2

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

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	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.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
Inhalation	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.
Ingestion	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

Symptoms	Causes severe skin burns and eye 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 does not burn but may decompose or vaporize to toxic vapors. Closed containers may explode due to buildup of pressure when exposed to extreme heat.

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. Avoid contact with eyes and skin. Do not breathe dust/fume/gas/mist/vapors/spray.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Prevent runoff to storm sewers and ditches leading to natural waterways.

Methods for Clean-Up Neutralize spilled material. Retrieve spilled material (absorb, pump, vacuum, shovel) immediately. Dispose of contents/container to an approved waste disposal plant.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing and eye/face protection. Wash face, hands, and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Store locked up. Store away from incompatible materials.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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
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

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use chemical safety goggles and/or full face shield.

Skin and Body Protection Impervious gloves and protective clothing are recommended.

Respiratory Protection Use supplied-air respiratory protection in confined or enclosed spaces.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Sweet
Appearance	Brown liquid	Odor Threshold	Not determined
Color	Brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	13	
Melting Point/Freezing Point	0 °C / 32 °F	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	> 93 °C / 200 °F	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid- Not Applicable	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	1.0791	
Water Solubility	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	
Additional Information	Volatizes Content: 21	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information****Eye Contact** Causes severe eye damage.**Skin Contact** Causes severe skin burns.**Inhalation** Do not inhale.**Ingestion** Do not ingest.**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Caustic Soda 1310-73-2	-	= 1350 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

Information on physical, chemical and toxicological effects**Symptoms** Please see section 4 of this SDS for symptoms.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Carcinogenicity** Group 3 IARC components are "not classifiable as human carcinogens".

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**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Caustic Soda 1310-73-2		45.4: 96 h Oncorhynchus mykiss mg/L LC50 static		
Ethylene Glycol Monobutyl Ether 111-76-2		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50		1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

This product is biodegradable.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
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 NA1760
 Proper Shipping Name Compounds, Cleaning Liquid (ethylene glycol monobutyl ether)
 Hazard Class 8
 Packing Group III

IATA

UN/ID No UN1760
 Proper Shipping Name Corrosive Liquid, n.o.s (ethylene glycol monobutyl ether)
 Hazard Class 8
 Packing Group III

IMDG

UN/ID No UN1760
 Proper Shipping Name Corrosive Liquid, n.o.s (ethylene glycol monobutyl ether)
 Hazard Class 8
 Packing Group III

15. REGULATORY INFORMATION

International Inventories

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

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

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	2	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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
Caustic Soda 1310-73-2	X	X	X
Ethylene Glycol Monobutyl Ether 111-76-2	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	3	1	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	3	1	0	D

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 Revision Note: New format

Disclaimer

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End of Safety Data Sheet