



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name MORADO SUPER CLEANER
Product use Heavy Duty Cleaner
Product code 0856
Date of issue 02/16/10 **Supersedes** 05/25/07

Emergency Telephone Numbers

For MSDS Information:
 Technical Services Group
 Telephone (780) 453-8100
 (Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency

CANUTEC (24 Hours)
 (613) 996-6666 - Call Collect

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Section 2. Hazards Identification

Emergency overview

WARNING!

HARMFUL IF SWALLOWED.

Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Contains material that may cause target organ damage, based on animal data. Wash thoroughly after handling.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Dermal contact. Eye contact. Inhalation.

Eyes

Severely corrosive to the eyes. Causes severe burns. Direct contact with the eyes can cause irreversible damage, including blindness.

Skin

Severely corrosive to the skin. Causes severe burns.

Inhalation

Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath.

Ingestion

Toxic if swallowed. May cause burns to mouth, throat and stomach.

Chronic effects

Contains material which may cause damage to the following organs: blood, kidneys, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

CAS number

% by Weight

ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	3 - 7
SODIUM HYDROXIDE; caustic soda; soda lye	1310-73-2	3 - 7
ALPHA OLEFIN SULFONATE; SODIUM SALT; sulfonic acids; c14-18 alkane and c12-20 alkene; c12-20 alkenehydroxy; sodium salts	68439-57-6	1 - 5

Section 4. First Aid Measures

Eye Contact

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point Closed cup: >93.3°C
(>199.9°F) [Tagliabue.]

Flammable Limits Not available.

Flammability Aqueous solutions are non-flammable.

Auto-ignition Temperature

Fire-Fighting Procedures In case of fire, use water spray (fog), foam, dry chemical or CO₂. Fire-fighters should wear appropriate protective equipment.

Fire hazard In a fire or if heated, a pressure increase will occur and the container may burst.

Products of Combustion carbon oxides (CO, CO₂) and other unidentified organic compounds

Explosion hazard Not available.

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

Handling Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly after handling.

Storage Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name

Ethylene Glycol Monobutyl Ether

Exposure limits

ACGIH TLV (United States). Absorbed through skin.

TWA: 20 ppm 8 hour(s).

OSHA PEL (United States). Absorbed through skin.

TWA: 50 ppm 8 hour(s).

Sodium Hydroxide

ACGIH / OSHA (United States).

CEIL: 2 mg/m³

Dodecylbenzene sulfonic acid

ACGIH / OSHA (United States).

TWA: 1 mg/m³ 8 hour(s).

ACGIH TLV (United States).

STEL: 3 mg/m³ 15 minute(s).

Personal Protective Equipment (PPE)

Eyes

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: Splash goggles. Face shield.



Hands and Body

Wear appropriate protective clothing to prevent skin contact. Recommended: Chemical-resistant gloves. Neoprene, Nitrile, latex rubber. Chemical-resistant apron. Chemical resistant boots.

Respiratory

Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties

Physical State	Liquid. [Clear to slightly hazy.]	Color	Purple.
pH	13.0-14.0	Odor	Ethereal.
Boiling Point	98.9°C (210°F)	Vapor Pressure	Not determined.
Specific Gravity	1.06	Vapor Density	>1 [Air = 1]
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	>1 (Water = 1)
Freezing Point	May start to solidify at 20°C (68°F) based on data for: SXS-40%. Weighted average: -3.77°C (25.2°F)	VOC (Consumer)	42 (g/l). (3.98%. 0.35 lbs/gal)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive or incompatible with the following materials: oxidizing materials, metals and acids.
Hazardous Polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Carcinogenicity Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sodium Hydroxide	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	500 mg/kg	-
Ethylene Glycol Monobutyl Ether	LD50 Dermal	Guinea pig	>2000 mg/kg	-
	LD50 Oral	Guinea pig	1200 mg/kg	-
	LC50 Inhalation Vapor	Guinea pig	>633 ppm	1 hours

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity


Product/ingredient name	Test	Result	Species	Exposure
Sodium Hydroxide	-	Acute LC50 25 ppm	Fish - Trout	24 hours

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream Code: - D002
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	3266	Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide)	8	II		Explosive Limit and Limited Quantity Index 1
IMDG Class	Not available.	Not available.	Not available.	-		-

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information**Canada****WHMIS (Canada)**

Class D-2B: Material causing other toxic effects (Toxic).

Class E: Corrosive material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.