



# Combat Detergent

Machine Detergent

## DESCRIPTION

**Combat Detergent** is a highly concentrated, heavy-duty alkaline detergent for automatic machine washing of cutlery, dishes, glasses, plasticwares, pots and pans. **Combat Detergent** is specifically formulated for use in hard water areas where minerals in the water cause poor results.

## DIRECTIONS

### **Dishwashing:**

Dispensed directly from shipping container into the machine by the automatic detergent controller. Best results are achieved with the water temperature between 60 °C - 70 °C (140 °F - 160 °F).

### **Glasswashing:**

Dispensed directly from shipping container into the glass washer. Warewash items should be rinsed with a sanitizing rinse solution such as *Sanidine*. **Combat Detergent** should not be used for manual cleaning.

## PHYSICAL DATA:

Appearance	Clear liquid
Color	Red
Foam	None
Odor	Mild
pH	12.5 - 13.5

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: **COMBAT DETERGENT**

WHMIS CODE: E

Proper Shipping Name: CAUSTIC ALKALI LIQUID, N.O.S.  
(sodium hydroxide)

Hazard Class: Class 8, P.G. II

UN Number: UN 1719

### HMIS

3	Health
0	Flammability
0	Reactivity
B	Personal

A=Goggles, B=Goggles & Gloves  
C=Goggles, Gloves and Apron

Maxim Technologies Inc.  
1607 Derwent Way  
Delta, BC V3M 6K8, Canada  
Phone: (604) 526-5655

### EMERGENCY PHONE

Canada: Canutec 613-996-6666  
U.S.A.: Chemtrec 800-424-9300

ABBREVIATION KEY: N/A=Not Applicable, N/E=Not Established, N/D=Not Determined, > =Greater Than

## SECTION 2 – HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO.	RANGE %	PEL	TLV
<b>SODIUM HYDROXIDE</b>	1310-73-2	7.0-15.0	2 mg/m3	2 mg/m3
LD50 (oral rat)	340 mg/kg			
LD50 (dermal)	1350 mg/kg			
LC50	No Data			
<b>NITRILOTRIACETIC ACID Na SALT</b>	18662-53-8	15.0-30.0	None	N/E
The above item is reported per 40 CFR 372, Section 313 of Emergency Planning & Community Right-To-Know Act of 1986.				
LD50 (oral rat)	830 mg/kg			
LD50 (dermal)	Not Available			
LC50	Not Available			

## SECTION 3 – PHYSICAL DATA

**Color and Odor:** Pale red, no odor. **Boiling Point:** N/D **Vapor Pressure (mm HG):** N/D **pH:** 13.0 +/- 0.5  
**Physical State:** Liquid. **Melting Point:** N/A **Vapor Density:** N/D **Specific Gravity:** 1.30 @ 20°C  
**Coef. Water/Oil Dist:** Greater than 1.0 **Evaporation Rate:** N/D **Solubility in Water:** Soluble **Odor Threshold:** No Data

## SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

**Flash Point and Method:** None to 100°C (TCC) **Sensitivity to Mechanical Impact:** None. **Extinguishing Media:** Not flammable.  
**Flammable Limits:** None known. **Sensitivity to Static Discharge:** None. **Auto ignition Temperature:** None known.  
**Conditions of Flammability:** None.  
**Unusual Fire and Explosion Hazards:** None known.  
**Hazardous Combustion Products:** Carbon and sulfur oxides may be liberated upon thermal decomposition.  
**Special Fire Fighting:** Wear full protective equipment, including a NIOSH/MSHA approved, self-contained breathing apparatus for fire fighting situations. Use water spray to cool all nearby fire exposed surfaces.

## SECTION 5 – REACTIVITY DATA

**Chemical Stability:** Stable under normal storage conditions. **Hazardous Polymerization:** Will not Occur.  
**Incompatibility (material to avoid):** Strong acids.  
**Hazardous Decomposition Products:** Carbon and sulfur oxides may be liberated upon thermal decomposition.

## SECTION 6 – TOXICOLOGICAL DATA

**Exposure Limits:** See Section 2 under Hazardous Ingredient. **Routes of Entry:** Skin, eyes, inhalation.  
**Irritancy of Product:** Corrosive to skin, eyes and respiratory system. **Carcinogenicity:** None known.  
**Sensitization:** None known. **Mutagenicity:** None known.  
**Name of Toxicological Synergistic Product:** None known. **Reproductive Toxicity:** None known.  
**Teratogenicity:** None known.  
**Effects of Chronic Exposure:** Repeated exposure to concentrated product will cause skin damage.  
**Effects of Acute Exposure to Product:** Corrosive: Causes damage to eyes and skin in concentrated form.

## SECTION 7 – PREVENTATIVE AND CONTROL MEASURES

**Respiratory Protection:** Normally not required. If inhalation of concentrated product, mist or spray is likely, use a NIOSH/MSHA approved dust/mist respirator.  
**Ventilation:** Good general ventilation or local exhaust ventilation for spraying and misting in confined areas.  
**Protective Gloves:** Use rubber or plastic gloves when handling the concentrated product.  
**Eye Protection:** If handling concentrated product use face shield for eye protection.  
**Protective Clothing and Equipment:** Long sleeve coveralls. Eye wash recommended in the immediate work area.  
**Storage and Handling Procedures:** Use good industrial hygiene. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing sprays or mists. Store in a cool, dry place away from incompatibles. Keep container closed when not in use. Do not mix with any other chemicals. Store at temperatures below 30°C (86°F) and keep from freezing.  
**Disposal Procedures for Spills or Leaks:** Wear protective equipment. Dike and contain large spills. Pump spills into an approved waste container. For small spills, soak up with a suitable absorbent such as clay, soil or commercially available absorbents, and then dispose of into an approved waste container. Keep away from sewers and out of natural waters.  
**Waste Disposal Method:** Reuse if possible, or otherwise dispose recovered material in accordance with all local, Provincial or Federal Regulations.  
**Special Shipping Information:** Store at temperatures below 30°C (86°F) and keep from freezing.

## SECTION 8 – EMERGENCY FIRST AID PROCEDURES

**First Aid:**  
If swallowed, give plenty of clean water to drink to dilute product. Do not induce vomiting. Call a Physician. In case of contact with eyes, flush with clean water for 15 minutes. Get medical attention. For contact with skin, wash with clean water and rinse well. If irritation occurs or persists, get medical attention.

## PREPARATION DATA

PREPARED BY: Technical Service / Regulatory Division

PHONE: 604-526-5655

LAST UPDATE: Dec. 16, 2014

THE INFORMATION PROVIDED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN OBTAINED FROM CURRENT SOURCES AND IS BELIEVED TO BE RELIABLE