



MATERIAL SAFETY DATA SHEET

Crown RV & Boat Cleaner

1 PRODUCT AND COMPANY INFORMATION

Product Name(s): Crown RV & Boat Cleaner
Product Code(s): 61127A
Uses: A solution used as a multi-purpose, extra heavy duty cleaner for RV's and boats.
Company: Crown Marketing, Inc.
Address: P.O. Box 1142; Nicholasville, KY 40340-1142; USA
Telephone Number: (800) 827-2364
Fax Number: (800) 827-2311
Emergency Telephone Number: Not available.
Date Issued: July 12, 2011
Date Revised: July 12, 2011

This MSDS complies with the OSHA Hazard Communication Standard 29CFR1910.1200, ANSI Z400.1-2004 and EC directive 2001/58/EC.

2 HAZARDS IDENTIFICATION

Hazard Overview:

CAUTION!

Incidental contact may cause irritation, redness or other transient effects. Prolonged, repeated contact, inhalation, ingestion, or absorption through the skin, may cause adverse effects to internal organ systems.

Physical State: Liquid
Color: Clear, colorless
Odor: Mild ether odor
Main Hazards: Irritant
Routes of Entry: Inhalation, ingestion, eye and skin contact, absorption.
Target Organs: Eyes, skin, respiratory system, liver, kidneys, central nervous system, blood.
Health Effects - Eyes: May cause eye irritation.
Health Effects - Skin: May cause skin irritation. Prolonged or repeated exposure may have the following effects: central nervous system depression, liver damage, kidney damage, blood effects.
Health Effects - Ingestion: May cause digestive tract irritation and nausea. May be harmful if swallowed. Prolonged or repeated exposure may have the following effects: central nervous system depression, liver damage, kidney damage, blood effects.
Health Effects - Inhalation: May cause irritation to respiratory tract. Higher concentrations may have the following effects: systemic effects similar to those resulting from ingestion, as well as nausea, dizziness.
Carcinogenic Status: This product is not considered carcinogenic by IARC, NTP and OSHA.
Reproductive Effects: This product is not considered reproductively toxic.



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2 HAZARDS IDENTIFICATION

Environmental Hazards: This product is not considered harmful to aquatic organisms. It is not expected to cause long-term adverse effects in the aquatic environment.

3 COMPOSITION / INGREDIENTS

Component	CAS Number	EC Number	Concentration	Hazards	Risks
Water	7732-18-5	231-791-2	> 85%	NONE	NONE
Ethylene Glycol Monobutyl Ether	111-90-0	203-919-7	3.0 - 5.9%	Xn	R36/37/38, R20/21/22

4 FIRST AID MEASURES

First Aid - Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

First Aid - Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately if irritation develops and persists. Wash contaminated clothing before reuse.

First Aid - Ingestion: If swallowed, DO NOT induce vomiting unless directed to do so by a physician. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

First Aid - Inhalation: If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek immediate medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Advice to Physician: Treat symptomatically.

5 FIRE FIGHTING MEASURES

Specific Hazards: This product may give rise to hazardous vapors in a fire. Vapors/fumes may be irritating, corrosive and/or toxic.

Extinguishing Media: Water spray, dry chemical, carbon dioxide, or foam is recommended. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Special Fire-Fighting Procedures: None recommended.

Unusual Fire & Explosion Hazards: This material is not combustible.

Protective Equipment for Fire-Fighting: Wear full protective clothing and self-contained breathing apparatus.

Additional Advice: None.



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6 ACCIDENTAL RELEASE MEASURES

Spill Procedures: Wipe up spills with an absorbent towel/material and transfer into suitable containers for recovery or disposal. Finally flush area with water.

Personal Precautions: Wear suitable protective clothing.

Environmental Precautions: None.

7 HANDLING AND STORAGE

Handling: Use this material in a well-ventilated area. If exposed to the solution, avoid contact with skin and eyes. Wash thoroughly after handling solution.

Storage: Use and store this material in dry areas at ambient temperatures away from heat, direct sunlight and hot metal surfaces. Keep away from any incompatible materials (see Section 10).

Additional Advice: Store as directed by the manufacturer.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure Standards: Exposure limits are listed below, if they exist.

Water: None.

Ethylene Glycol
Monobutyl Ether: ACGIH: 20 ppm TWA TLV.
EU: 20ppm (98mg/m³) TWA.
EU: 50ppm (246mg/m³) STEL.
UK: 25ppm TWA.
UK: 50ppm STEL.
OSHA: 50ppm TWA PEL.

Engineering Control Measures: Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.

Respiratory Protection: A NIOSH certified air purifying respirator with an organic vapor cartridge may be used under conditions where airborne concentrations are expected to exceed exposure limits.

Hand Protection: The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage (see glove manufacturer literature for information on permeability).

Eye Protection: Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended.

Body Protection: Not required under normal use.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Colorless

Odor: Mild, ether-like

Odor Threshold: 9.3 mg/L (ethylene glycol monobutyl ether)



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9 PHYSICAL AND CHEMICAL PROPERTIES

pH:	12.0 - 13.0
Melting Point/Range (°C/°F):	ca. 0°C / 32°F (water)
Boiling Point/Range (°C/°F):	ca. 100°C / 212°F (water)
Flash Point (PMCC) (°C/°F):	> 94°C / 201°F
Evaporation Rate:	Not available.
Flammability / Explosivity Limits in Air (%):	Not available.
Vapor Pressure:	0.88 mmHg (25°C) (ethylene glycol monobutyl ether) 23.8 mmHg (25°C) (water)
Vapor Density (Air = 1):	Not available.
Relative Density:	1.022 (20°C)
Solubility in Water:	Completely soluble
Partition Coefficient:	Not available.
Autoignition Temperature (°C/°F):	Not available.
Decomposition Temperature (°C/°F):	Not available.
Viscosity:	Not available.
Volatile Organic Content (VOC) (g/l):	ca. 30 - 59 g/l (as defined by 40CFR51.100)

10 STABILITY AND REACTIVITY

Reactivity:	Product will not undergo additional reaction.
Stability:	Stable under normal conditions.
Conditions to Avoid:	Contact with incompatible materials, excessive heat.
Incompatibilities:	Oxidizing agents, strong bases, strong acids.
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	Oxides of carbon, oxides of nitrogen, oxides of phosphorus, oxides of sodium, oxides of sulfur, toxic by-products.

11 TOXICOLOGICAL INFORMATION

If available, toxicity data for the product is given; otherwise component data is listed.

Acute Toxicity:	This product is not expected to be appreciably toxic. (Ethylene glycol monobutyl ether) Oral LD50 (rat) 1.48 g/kg (Ethylene glycol monobutyl ether) Dermal LD50 (rabbit) 400 mg/kg (Ethylene glycol monobutyl ether) Inhalation LC50 (rat) 450-486 ppm/4 hr
Skin Corrosion / Irritation:	The product may be irritating to the skin. (Ethylene glycol monobutyl ether) Slightly irritating to skin (rabbit).
Serious Eye Damage / Irritation:	The product is irritating to the eyes. (Ethylene glycol monobutyl ether) Irritating to eyes (rabbit)
Respiratory or Skin Sensitization:	The product is not expected to be dermally sensitizing.



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11 TOXICOLOGICAL INFORMATION

Mutagenicity:	(Ethylene glycol monobutyl ether) Not sensitizing in guinea pigs. This product is not expected to be mutagenic. (Ethylene glycol monobutyl ether) Generally regarded as not genotoxic.
Carcinogenicity:	This product is not expected to be carcinogenic. (Ethylene glycol monobutyl ether) In inhalation studies there was some evidence of carcinomas of the liver and stomach in mice. Studies on rats were equivocal. Classified as non-carcinogenic in humans.
Reproductive/Developmental Toxicity:	This product is not expected to be developmentally harmful. (Ethylene glycol monobutyl ether) No adverse reproductive or developmental effects have been observed at less than toxic doses.
Chronic/Subchronic Toxicity: Specific Target Organ/Systemic Toxicity – Single Exposure:	(Ethylene glycol monobutyl ether) Significant changes to red blood cells have been observed in rats and mice.
Chronic/Subchronic Toxicity: Specific Target Organ/Systemic Toxicity – Repeated Exposure:	(Ethylene glycol monobutyl ether) Adverse effects on the central nervous system, kidneys and liver occur at higher exposure concentrations than do the blood effects in rats.
Aspiration Hazard:	This product does not present an appreciable aspiration hazard.
Additional Information:	None.

12 ECOLOGICAL INFORMATION

If available, ecological data for the product is given; otherwise component data is listed.

Acute Ecotoxicity:	This product is not expected to be appreciably toxic. (Ethylene glycol monobutyl ether) LC50 (Rainbow trout) >1000 mg/l/96-hr (Ethylene glycol monobutyl ether) LC50 (Fathead minnow) 2137 mg/l/96-hr (Ethylene glycol monobutyl ether) LC50 (Daphnia magna) 1720 mg/l/24 hr
Mobility:	(Ethylene glycol monobutyl ether) Expected to have high mobility based upon an estimated Koc of 67.
Persistence/Degradability:	(Ethylene glycol monobutyl ether) Expected to rapidly degrade in water.
Bioaccumulation:	(Ethylene glycol monobutyl ether) An estimated BCF of 3 suggests the potential for bioconcentration in aquatic organisms is low.

13 DISPOSAL CONSIDERATION

Environmental precautions:	Prevent the material from entering drains or water courses. Do not discharge directly to a water source.
Product Disposal:	Dispose in accordance with all local, state (provincial), and federal regulations.
Container Disposal:	Not applicable.



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14 TRANSPORT INFORMATION

DOT Proper Shipping Name:	Not Regulated
UN Number:	Not applicable.
UN Class:	Not applicable.
UN Packaging Group:	Not applicable.
Reportable Quantity:	Not applicable.
Marine Pollutant:	None.

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Consult current IATA Regulations prior to shipping by air.

15 REGULATORY INFORMATION

US Toxic Substance Control Act:	All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
Canadian Domestic Substance List:	All components of this product are listed or exempt from listing on the Domestic Substance List..
EU Existing Inventory of Chemical Substances:	All components of this product are in compliance with the inventory listing requirements of the E.U. Existing Inventory of Chemical Substances (EINECS). All components have been pre-listed under REACH.
TSCA Sec.12(b) Export Notification:	This product does not contain a chemical at or above de minimis concentrations which requires reporting.
WHMIS Classification:	D.2.B
Massachusetts Right-To-Know:	This product contains materials subject to disclosure under the Massachusetts' Right-To-Know Law: - Ethylene glycol monobutyl ether
New Jersey Right-To-Know:	This product contains materials subject to disclosure under the New Jersey's Right-To-Know Law: - Ethylene glycol monobutyl ether (2369)
Pennsylvania Right-To-Know:	This product contains materials subject to disclosure under the Pennsylvania's Right-To-Know Law: - Ethylene glycol monobutyl ether
California Proposition 65:	This product contains materials which the State of California has found to cause cancer, birth defects or other reproductive harm. - Ethylene oxide (trace residual - < 20ppm) - Formaldehyde (trace residual - < 2ppm)
SARA TITLE III-Section 311/312 Categorization (40 CFR 370):	Immediate, delayed hazard
SARA TITLE III-Section 313 (40 CFR 372):	This product contains materials which are listed in Section 313 at or above de minimis concentrations: - Ethylene glycol monobutyl ether (as glycol ethers)
CERCLA Hazardous Substance (40 CFR 302)	This product contains materials subject to reporting under CERCLA and Section 304 of EPCRA: - Ethylene glycol monobutyl ether (as glycol ethers)



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15 REGULATORY INFORMATION

Water Hazard Class (WGK):	This product is slightly water-endangering (WGK=1).	
Other Chemical Inventories:	Australia (AICS):	All components listed or exempt from listing.
	China (IECSC):	All components listed.
	Japan (ENCS):	All components listed or exempt from listing.
	Korea (KCI):	All components listed or exempt from listing.
	Philippines (PICCS):	All components listed.
EU Classification:	EC Symbols:	Xi – Irritant
	EC Risk Phrases:	R36/37/38 – Irritating to eyes, skin and respiratory system.
	EC Safety Phrases:	S2 – Keep out of the reach of children. S25 – Avoid contact with eyes. S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37 – Wear suitable gloves. S64 – If swallowed, rinse mouth with water (only if the person is conscious).

16 OTHER INFORMATION

NFPA Rating - HEALTH:	2
NFPA Rating - FIRE:	1
NFPA Rating - REACTIVITY:	0
NFPA Rating - SPECIAL:	NONE
Abbreviations:	CAS#: Chemical Abstract Services Number ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration NFPA: National Fire Protection Association DOT: US Department of Transportation RCRA: US Resource Conservation and Recovery Act TLV: Threshold Limit Value PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit WEEL: Workplace Environmental Exposure Levels AIHA: American Industrial Hygiene Association NTP: National Toxicology Program IARC: International Agency for Research on Cancer R: Risk S: Safety LD50: Lethal Dose 50% LC50: Lethal Concentration 50% EC50: Effective Concentration 50% BCF: Bioconcentration Factor BOD: Biological Oxygen Demand Koc: Soil Organic Carbon Partition Coefficient. TIm: Median Tolerance Limit

Disclaimer: *The data contained herein is based on information that the company believes to be reliable, but no expressed or implied warranty is made*



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16 OTHER INFORMATION

with regard to the accuracy of such data or its suitability for a given situation. Such data relates only to the specific product described and not to such products in combination with any other product and no agent of the company is authorized to vary any of such data. The company and its agents disclaim all liability for any action taken or foregone on reliance upon such data.

Prepared by:

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