



MATERIAL SAFETY DATA SHEET

CONFORMS TO THE GLOBALLY HARMONIZED SYSTEM (GHS), ANSI Z400.1-2004, EU DIRECTIVE 91/155/EEC & 99/45/EC, OSHA 29 CFR 1910.1200, NOHSC:2011(2003), AND CANADIAN CPR

Section 1 ● PRODUCT AND COMPANY IDENTIFICATION ● Section 1

Product Numbers *MC*
 Product Name *Marine Clean*
 Synonyms *None*
 Products Uses *Cleaner*
 Revision Number *1*
 Revision Date *October 26, 2010*
 Print Date *February 9, 2011*

**24 hr Emergency
Phone Number**

800-424-9300
(Chemtrec)

MANUFACTURER INFORMATION		DISTRIBUTOR INFORMATION	
Company Name	<i>POR-15, Inc.</i>	Company Name	
Address	<i>PO Box 1235 Morristown NJ 07962</i>	Address	
Phone Number	<i>973-887-1999</i>	Phone Number	
Fax Number	<i>973-887-8007</i>	Fax Number	

Section 2 ● HAZARDS IDENTIFICATION ● Section 2

EMERGENCY OVERVIEW	DANGER! CONTENTS CORROSIVE. AVOID CONTACT WITH SKIN AND EYES. HARMFUL OR FATAL IF SWALLOWED.
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OSHA Classification *This product is a "hazardous chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.*

European Classification *Xn, Xi, C
R 20/21/22-34-36/38
S 1/2-26-36/37/39-45-46*

WHMIS Classification *D2A, D2B*

HEALTH	* 2
FLAMMABILITY	0
PHYSICAL HAZARD	0



HEALTH HAZARDS		PHYSICAL HAZARDS			
Irritant <input checked="" type="checkbox"/>	Sensitizer <input type="checkbox"/>	Combustible <input type="checkbox"/>	Explosive <input type="checkbox"/>	Pyrophoric <input type="checkbox"/>	
Toxic <input type="checkbox"/>	Highly Toxic <input type="checkbox"/>	Flammable <input type="checkbox"/>	Oxidizer <input type="checkbox"/>	Water Reactive <input type="checkbox"/>	
Corrosive <input checked="" type="checkbox"/>	Carcinogenic <input type="checkbox"/>	Compressed Gas <input type="checkbox"/>	Organic Peroxide <input type="checkbox"/>	Unstable <input type="checkbox"/>	

✧ See Section 11

LABELING REQUIREMENTS			
CANADA	UNITED STATES	EUROPE & AUSTRALIA	GHS
	DANGER CONTENTS CORROSIVE		



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POTENTIAL HEALTH EFFECTS AND SIGNS / SYMPTOMS OF EXPOSURE

Eye Contact	<i>Corrosive! May causes burning or irritation with symptoms of reddening, tearing, stinging, and swelling. May cause corneal injury.</i>
Skin Contact	<i>Corrosive! May cause burning or irritation with symptoms of reddening, itching, and swelling.</i>
Ingestion	<i>Corrosive! May cause burning or irritation. Symptoms may include abdominal pain, nausea, vomiting, diarrhea or death.</i>
Inhalation	<i>May cause respiratory irritation</i>
Effects of Chronic Exposure	<i>Not Available</i>
Medical Conditions Aggravated	<i>May aggravate pre-existing conditions associated with the target organs.</i>
Target Organs	<i>Eyes, Skin, Respiratory System</i>
Routes of Exposure	<i>Skin contact, eye contact, inhalation</i>
Potential Environmental Effects	<i>See Section 12 for environmental effects</i>

Section 3 ● COMPOSITION / INFORMATION ON INGREDIENTS ● Section 3

ID	INGREDIENT	CAS NUMBER	EINECS	EU CLASSIFICATION	% WT
1	Water	007732-18-5	231-791-2	Not Classified in Annex I of Directive 67/548/EEC	—
2	Ethylene Glycol Monobutyl Ether	000111-76-2	203-905-0	Xn, Xi; 20/21/22-36/38	3 - 7
3	Nonylphenol Ethoxylate	026027-38-3	500-045-0	Not Classified in Annex I of Directive 67/548/EEC	—
4	Potassium Hydroxide	001310-58-3	215-181-3	C; 22-34	1 - 5

Risk Phrases	<i>See Section 15 for risk phrase text</i>
LD50 and LC50 Information	<i>See Section 11 for toxicological information</i>
Occupational Exposure Limits	<i>See Section 8 for OELs</i>

Section 4 ● FIRST AID MEASURES ● Section 4

Ingestion	<i>DO NOT INDUCE VOMITING! Do not give anything by mouth to an unconscious individual. Consult a physician immediately.</i>
Skin Contact	<i>Remove with soap and water, rinsing and repeating for 15 minutes. Use skin cream to counter any resulting dryness. Consult a physician if irritation continues. Remove contaminated clothing.</i>
Eye Contact	<i>Check for and remove any contact lenses. Immediately flush with clear water for at least 15 minutes, including under the eyelids. Get medical attention immediately.</i>
Inhalation	<i>Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen</i>
Notes to Physician	<i>Treat symptomatically</i>
Antidotes	<i>No specific antidote</i>

Section 5 ● FIRE FIGHTING MEASURES ● Section 5

Flash Point	<i>Non-Flammable</i>
Autoignition Temperature	<i>Non-Flammable</i>
Explosive Limits	<i>Non-Flammable</i>
Conditions of Flammability	<i>Heat, sparks, flame, red hot metal</i>
Extinguishing Media	<i>Use extinguishing media suitable for nearby materials</i>
Unsuitable Extinguishing Media	<i>Not applicable</i>
Hazardous Combustion Products	<i>oxides of carbon (CO, CO2), smoke, and vapors</i>
Sensitivity to Mechanical Impact	<i>Probably not sensitive as material is stable.</i>
Sensitivity to Static Discharge	<i>Probably not sensitive as material is non-flammable.</i>



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Special Equipment and Precautions *Use water spray to cool fire exposed containers, as contents can rupture violently from heat developed pressure. Firemen should wear self-contained breathing apparatus.*
Special Explosion Hazards *CORROSIVE LIQUID.*
Autoreactivity / Oxidizing Properties *Not available*

Section 6 ● ACCIDENTAL RELEASE MEASURES ● Section 6

Personal Precautions *Use personal protection recommended in Section 8. Isolate hazard area and deny entry to unnecessary and unprotected personnel.*
Environmental Precautions *Keep out of drains, sewers, ditches, and waterways.*
Containment Procedures *Released content may be contained with absorbent pads, booms, and/or absorbents suitable for water-based materials.*
Cleanup Procedures *For small spills dilute with water and mop up, or absorb with an inert material and place in an appropriate waste disposal container. If necessary, neutralize the residue with a dilute solution of acetic acid. For large spills stop leak if without risk. Use water spray to reduce vapors. Call for assistance on disposal and cleanup.*
Other Information *The North American Emergency Response Guidebook, the Australian Dangerous Goods-Initial Emergency Response Guide (SAA/SNZ HB 76), or similar resources providing emergency response information for dealing with accidents, spills, leaks, and/or fires involving dangerous goods.*
Prohibited Materials *Combustible absorbent material such as sawdust, use of equipment that may cause sparking.*
Reporting Requirements *Report releases that reach surface water or groundwater in any amount. Spills, leaks, and overfills from a regulated underground storage tank should also be reported. Reportable quantities for spills onto the ground depend on site conditions, such as the type of soil and the type of material spilled, and Federal and local agencies often have different reportable quantities. If you are unsure of your reporting requirements contact the regulating agency in your area.*

Section 7 ● HANDLING AND STORAGE ● Section 7

Precautions for Safe Handling and Use *KEEP OUT OF THE REACH OF CHILDREN.*
Storage Requirements and Conditions *Keep containers tightly closed and stored in a well-ventilated place. Store away from incompatible materials.*
Special Packaging Materials *Not applicable.*

Section 8 ● EXPOSURE CONTROLS / PERSONAL PROTECTION ● Section 8

Occupational Exposure Limits

ID	UNITED STATES OSHA PEL	UNITED STATES NIOSH REL	UNITED STATES NIOSH IDLH	UNITED STATES ACGIH TLV	AUSTRALIA TWA	GERMANY MAK	JAPAN OEL
1	N/E	N/E	N/E	N/E	N/E	N/E	N/E
2	50 ppm	5 ppm	700 ppm	20 ppm	20 ppm	20 ppm	N/E
3	N/E	N/E	N/E	N/E	N/E	N/E	N/E
4	2 mg/m ³ C	2 mg/m ³ C	N/E	2 mg/m ³ C	2 mg/m ³ C	N/E	2 mg/m ³ C

ID	CANADA ALBERTA OEL	CANADA BC TWA	CANADA ONTARIO TWAEV	CANADA QUEBEC TWA	MEXICO MPEL-PTA	UNITED KINGDOM WEL	UNITED STATES AIHA WEEL
1	N/E	N/E	N/E	N/E	N/E	N/E	N/E
2	25 ppm	20 ppm	20 ppm	25 ppm	25 ppm	25 ppm	N/E
3	N/E	N/E	N/E	N/E	N/E	N/E	N/E
4	2 mg/m ³ C	2 mg/m ³ C	2 mg/m ³ C	2 mg/m ³ C	N/E	2 mg/m ³ C	N/E

Engineering Measures *Use local exhaust to control air concentration levels below the recommended exposure levels.*
Biological Exposure Indices *None established.*



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General Hygiene Considerations *Avoid breathing vapors and contact with the skin and eyes. Always replace lid when not in use. Keep out the reach of children. Wash hands after use.*

Thermal Hazards *This product does not present a thermal hazard.*

PERSONAL PROTECTIVE EQUIPMENT



Respiratory Protection *Wear an appropriate respirator when ventilation is not adequate. In the United States ensure compliance with OSHA standard 29 CFR 1910.134.*

Skin Protection *Ensure any exposed skin is covered by using chemical protective boots, gloves, coveralls, and/or other resistant protective clothing.*

Eye/Face Protection *Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact with this material could occur, chemical splash proof goggles or a full face shield are recommended.*

Other Protective Equipment *Safety showers and eye-wash stations should be available in the workplace near where the material will be used.*

Section 9 ● PHYSICAL AND CHEMICAL PROPERTIES ● Section 9

Boiling Point	> 212 °F (100.0 °C)	Melting / Freezing Point	> 32 °F (0.0 °C)
Flash Point	<i>Non-Flammable</i>	Autoignition Temperature, Liquid	<i>Non-Flammable</i>
Explosive Limits	<i>Non-Flammable</i>	Decomposition Temperature	<i>Not Available</i>
Flammability	<i>Non-Flammable</i>	Density (H ₂ O = 1)	1.027 g/cc
Molecular Weight	<i>Not Available</i>	Weight	8.573 lbs/gal
Vapor Pressure	<i>Not Available</i>	pH	9.5 - 13.1
Vapor Density	<i>Not Available</i>	Evaporation Rate (BuAC = 1)	<i>Not Available</i>
Physical State	<i>Liquid</i>	Partition Coefficient	<i>Not Available</i>
Viscosity	<i>Not Available</i>	Refractive Index	<i>Not Available</i>
Odor Threshold	<i>Not Available</i>	Heat of Combustion	<i>Not Available</i>
Odor	<i>Mild</i>	Water Solubility	<i>Not Available</i>
Appearance / Color	<i>Clear colorless</i>		
Percent Volatile	92% Wt (93% Vol) Max	VOC Content	0.428 lbs/gal (45.057 g/L)
Percent VOC	5% Wt (6% Vol) Max	HAP Content	None
Solids Content	None	Maximum Incremental Reactivity	0.146

Section 10 ● STABILITY AND REACTIVITY ● Section 10

Stability	<i>Stable</i>
Physical Hazards	<i>Corrosive liquid</i>
Conditions to Avoid	<i>Not Available</i>
Hazard Polymerization	<i>Will not occur</i>
Material Incompatibility	<i>Strong oxidizing agents, reducing agents, acids</i>
Conditions of Reactivity	<i>Not Available</i>
Decomposition Products	<i>H₂</i>



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Section 11 ● TOXICOLOGICAL INFORMATION ● Section 11

Irritancy of Product *The following ingredients are eye irritants: Butyl Cellosolve, Potassium Hydroxide. The following ingredients are skin irritants: Butyl Cellosolve, Potassium Hydroxide.*

Sensitization to Product *None of the ingredients are known or suspected sensitizers*

Carcinogen Data *None of the ingredients are known of suspected carcinogen*

Reproductive Toxicity *None of the ingredients are known or suspected reproductive toxins*

Teratogenicity *None of the ingredients are known or suspected teratogens*

Mutagenicity *None of the ingredients are known or suspected mutagens*

Synergistic Products *No known synergistic properties.*

LD₅₀ and LC₅₀ Information

ID	ORAL LD50	DERMAL LD50	INHALATION LC50
1	> 89000 mg/kg, rat	Not Available	Not Available
2	470 mg/kg, rat	220 mg/kg, rabbit	2211 mg/m ³ /4 hr, rat
3	1410 mg/kg, rat	2830 mg/kg, rabbit	Not Available
4	365 mg/kg, rat	> 1260 mg/kg, rabbit	Not Available

Section 12 ● ECOLOGICAL INFORMATION ● Section 12

Mobility *Not Available*

Persistence *Not Available*

Degradability *Not Available*

Bioaccumulation *Not Available*

Other Ecologic Data *Do not allow to enter waters, waste water, or soil.*

Effects on the Ozone Layer *This product does not contain any ozone depleting ingredients.*

Ecotoxicity

ID	FISH	INVERTEBRATES	AQUATIC PLANTS	MICROORGANISMS
1	Not Available	Not Available	Not Available	Not Available
2	LC50: 1490 mg/L /96 hr	EC50: 1720 mg/L /24 hr	LOEC: 900 mg/L /7 day	EC5: 911 mg/L /48 hr
3	LC50: 188.2 mg/L /48 hr	LC50: 21.4 mg/L /48 hr	EC50: 17 mg/L /48 hr	Not Available
4	LC50: 85 mg/L /24 hr	Not Available	Not Available	Not Available

Section 13 ● DISPOSAL CONSIDERATIONS ● Section 13

Waste Disposal *Hazard characteristics and regulatory waste stream classification can change with product use and location. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment, and/or disposal methodologies for spent materials and residues at the time of disposition. All waste material must be disposed of in compliance with the respective national, federal, state, and/or local regulations.*

Waste Disposal of Packaging *Consult with local landfill to determine if empty small containers can be disposed of regular trash pickup.*

For disposal of large containers (typically 10 gallon or larger), or for containers not suitable for landfill, containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death. Do not attempt to clean since residue is difficult to remove. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Landfill Precautions *Not Available*

Incineration Precautions *Not Available*








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Section 14

• TRANSPORTATION INFORMATION •

Section 14

DOT SHIPPING INFORMATION (United States)  PROPER SHIPPING NAME: ... <i>Consumer Commodity</i> HAZARD CLASS: ... <i>ORM-D</i> PACKAGING GROUP: ... UN or ID NUMBER: ... NAERG GUIDE NUMBER: ... <i>171</i>		ICAO/IATA SHIPPING INFORMATION (International Air)  PROPER SHIPPING NAME: ... <i>Consumer Commodity</i> HAZARD CLASS: ... <i>9</i> PACKAGING GROUP: ... UN or ID NUMBER: ... <i>ID8000</i>	
IMDG SHIPPING INFORMATION (International Ocean)  PROPER SHIPPING NAME: ... <i>Potassium Hydroxide solution</i> CLASS: ... <i>8</i> PACKAGING GROUP: ... <i>III</i> SUBSIDIARY RISK(S): ... UN or ID NUMBER: ... <i>UN1814</i> PACKING INSTRUCTIONS: ... <i>P001, LP01</i> EmS NO.: ... <i>F-A, S-B</i> STOWAGE: ... <i>Category A</i> MFAG NO.: ... <i>705</i>		ADR SHIPPING INFORMATION (European Union)  PROPER SHIPPING NAME: ... <i>Potassium Hydroxide solution</i> ADR CLASS: ... <i>8</i> PACKAGING GROUP: ... <i>III</i> UN or ID NUMBER: ... <i>UN1814</i> CLASSIFICATION CODE: ... <i>C5</i> HAZARD IDENTIFICATION NO: ... <i>80</i> EMERGENCY ACTION CODE: ... <i>2R</i>	
TDG SHIPPING INFORMATION (Canada)  PROPER SHIPPING NAME: ... <i>Potassium Hydroxide solution</i> HAZARD CLASS: ... <i>8</i> PACKAGING GROUP: ... <i>III</i> UN or ID NUMBER: ... <i>UN1814</i>		NMFC DESCRIPTION (United States) ITEM DESCRIPTION: ... <i>Compounds Cleaning, NOI</i> ITEM NUMBER: ... <i>48580 Sub 3</i> CLASS: ... <i>55</i>	

Section 15

• REGULATORY INFORMATION •

Section 15

United States - Federal

ID	TSCA INVENTORY	SARA 302 EHS	RCRA	CERCLA	SARA 313	FIRE	REACTIVITY	SARA 311/312 ACUTE	CHRONIC	PRESSURE	CLEAN AIR ACT	CLEAN WATER ACT
1	✓	—	—	—	—	—	—	—	—	—	—	—
2	✓	—	—	—	5 %	—	—	✓	✓	—	—	—
3	✓	—	—	—	—	—	✓	✓	✓	—	—	—
4	✓	—	—	1000 #	—	—	—	—	—	—	—	—

United States - States

ID	CALIFORNIA	DELAWARE	FLORIDA	MASSACHUSETTS	PENNSYLVANIA	MINNESOTA	NEW JERSEY	NEW YORK	WASHINGTON
1	—	—	—	—	—	—	—	—	—
2	—	—	✓	2, 4, 6 F8	—	AO	—	—	✓
3	—	—	—	—	—	—	—	—	—
4	—	✓	✓	4, 5 F8	E	A	—	✓	✓

Canada

ID	WHMIS CATEGORIES										CHEMICAL LISTS		
	A	B	C	D1A	D1B	D2A	D2B	D3	E	DSL	NDSL	NPRI	CWC
1	—	—	—	—	—	—	—	—	—	✓	—	—	—
2	—	B3	—	—	—	✓	✓	—	—	✓	—	1A, 5	—
3	—	—	—	—	—	—	—	—	—	✓	—	—	—
4	—	—	—	—	✓	—	—	—	✓	✓	—	—	—

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

European Union

CODE	RISK PHRASES
R 20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R 34	Causes burns
R 36/38	Irritating to eyes and skin

CODE	SAFETY PHRASES
S 1/2	Keep locked up and out of the reach of children
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S 36/37/39	Wear suitable protective clothing, gloves & eye/face protection



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Part No. MC
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CODE	SAFETY PHRASES
S 45	<i>In case of accident or if you feel unwell, seek medical advice immediately</i>
S 46	<i>If swallowed, seek medical advice immediately</i>

RoHS Compliance



This product is RoHS compliant according to the definitions and restrictions given by Directive 2002/95/EC and The Council of January 27, 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Australia

Poisons Schedule Number

None of the ingredients are present at or above a concentration necessary for allocation of a Poisons Schedule Number.

Chemical Inventory Status

All of the ingredients are listed on the Australian Inventory of Chemical Substances (AICS) or are exempt.

Section 16

● OTHER INFORMATION ●

Section 16

Disclaimer of Liability

The information contained herein is based upon data provided to us by our suppliers, and reflects our best judgement. However, no warranty of merchantability, fitness for any use, or any other warranty or guarantee is expressed or implied regarding the accuracy of such data, or the results to be obtained from use thereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of such application. This information is furnished upon the condition that the persons receiving it shall make their own determinations of the suitability of the material for any particular use. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist.

Revision History

*Revision 1, 08/19/2010, Original
Revision 2, 10/26/2010, Clarified EU information in Section 3*