

SAFETY DATA SHEET

1. Identification

Product identifier	On & Off Gel Hull & Bottom Cleaner		
Other means of identification			
Product code	MK35128		
Recommended use	Cleaner for fiberglass hulls		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier	/Distributor information		
Manufactured or sold by:			
Company name	CRC Industries, Inc.		
Address	885 Louis Dr.		
Telephone	Warminster, PA 18974 US		
General Information	215-674-4300		
Technical	800-521-3168		
Assistance			
Customer Service	800-272-4620		
24-Hour Emergency	800-424-9300 (US) 703-527-3887 (International)		
(CHEMTREC) Website	www.crcindustries.com		
2. Hazard(s) identification	1		
Physical hazards	Corrosive to metals	Category 1	
Health hazards	Acute toxicity, oral	Category 4	
	Skin corrosion/irritation	Category 1B	
	Serious eye damage/eye irritation	Category 1	
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3	
OSHA defined hazards	Not classified.		
Label elements			
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Signal word	Danger		
Hazard statement	May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. Harmful to aquatic life.		
Precautionary statement			
Prevention	Keep only in original container. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.		
Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.		
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.		

Disposal

Hazard(s) not otherwise classified (HNOC)

Supplemental information

When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.

3. Composition/information on ingredients

Aixtures			
Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	80 - 90
Hydrochloric Acid		7647-01-0	10 - 20
Phosphoric Acid		7664-38-2	3 - 5
Oxalic Acid		144-62-7	1 - 3
Tallow alkyl amines, ethoxylated		61791-26-2	1 - 3

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. If respiratory irritation, dizziness, or unconsciousness occurs, seek immediate medical assistance.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Probable mucosal damage may contraindicate the use of gastric lavage.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	This product is miscible in water. Should not be released into the environment.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.
7. Handling and storage	
Precautions for safe handling	Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Avoid release to the environment. Use care in handling/storage. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components Type Value Hydrochloric Acid (CAS Ceiling 7 mg/m3 7647-01-0) 5 ppm Oxalic Acid (CAS 144-62-7) PFI 1 mg/m3 Phosphoric Acid (CAS PEL 1 mg/m3 7664-38-2) **US. ACGIH Threshold Limit Values** Components Value Type Hvdrochloric Acid (CAS Ceiling 2 ppm 7647-01-0) Oxalic Acid (CAS 144-62-7) STEL 2 ma/m3 1 mg/m3 TWA Phosphoric Acid (CAS STEL 3 mg/m3 7664-38-2) TWA 1 mg/m3 **US. NIOSH: Pocket Guide to Chemical Hazards** Components Value Type Hydrochloric Acid (CAS 7 mg/m3 Ceiling 7647-01-0) 5 ppm Oxalic Acid (CAS 144-62-7) STEL 2 mg/m3 TWA 1 mg/m3 Phosphoric Acid (CAS STEL 3 mg/m3 7664-38-2) TWA 1 mg/m3 **Biological limit values** No biological exposure limits noted for the ingredient(s). Appropriate engineering Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates controls should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye

wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment			
Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield.		
Skin protection Hand protection	Wear protective gloves such as: Latex. Neoprene.		
Other	Wear appropriate chemical resistant clothing.		
Respiratory protection	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an acid gas cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Blue green.
Odor	Cherry. Acid.
Odor threshold	Not available.
рН	< 1
Melting point/freezing point	< 0 °F (< -17.8 °C)
nitial boiling point and boiling range	195 °F (90.6 °C)
Flash point	None (Tag Closed Cup)
Evaporation rate	Similar to water.
lammability (solid, gas)	Not available.
Jpper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
/apor pressure	19.3 hPa estimated
/apor density	Not available.
Relative density	1.08
Solubility (water)	100 % Soluble.
Partition coefficient n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
/iscosity (kinematic)	Not available.
Percent volatile	84 % estimated

10. Stability and reactivity

Reactivity	Reacts violently with strong alkaline substances. This product may react with reducing agents. May be corrosive to metals.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Temperatures above 50 °C or below 10 °C. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as Hydrogen chloride and Phosgene. Do not mix with other chemicals. Contact with incompatible materials.
Incompatible materials	Bases. Strong oxidizing agents. Reducing agents. Metals. Bleach.

11. Toxicological information

Information	on likel	y routes of	exposure
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Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.		
Skin contact	Causes severe skin burns.		
Eye contact	Causes serious eye damage.		
Ingestion	Causes digestive tract burns. Harmful if swallowed.		
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.		

Information on toxicological effects

In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful if swallowed. May cause respiratory irritation.

Product	Species	Test Results	
On & Off Gel Hull & Bottom Cleaner			
Acute			
Dermal			
LD50	Rabbit	> 2000 mg/kg	
Inhalation			
LC50	Rat	> 20 mg/l, 4 hours	
Oral			
LD50	Rat	> 1850 mg/kg	
* Estimates for product may b	e based on additional component da	ta not shown.	
Skin corrosion/irritation	Causes severe skin burns and eye	damage.	
Serious eye damage/eye irritation	Causes serious eye damage.		
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	This product is not expected to cause skin sensitization.		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.		
IARC Monographs. Overall Evaluation of Carcinogenicity			
Hydrochloric Acid (CAS 7	7647-01-0)3 Not classifiable as to carcinogenicity to humans.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.		
Specific target organ toxicity - single exposure	May cause respiratory irritation.		
Specific target organ toxicity - repeated exposure	Not classified.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	Prolonged inhalation may be harmful.		
12. Ecological information	n		
-	Liemenful to any attailife. Descures of	the low of this product it would be even stad to produce	

cotoxicity		Harmful to aquatic life. Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.		
Product	Species Test Results			
On & Off Gel Hull & Bo	ottom Cleaner			
Aquatic				
Crustacea	EC50	Daphnia	182.3019 mg/l, 48 hours estimated	
Fish	LC50	Fish	148.2279 mg/l, 96 hours estimated	

Components		Species	Test Results	
Hydrochloric Acid (CAS 7647	'-01-0)			
Aquatic				
Fish	LC50	Western mosquitofish (Gambusia affinis)	282 mg/l, 96 hours	
Oxalic Acid (CAS 144-62-7)				
Aquatic				
Crustacea	EC50	Water flea (Daphnia magna)	125 - 150 mg/l, 48 hours	
Tallow alkyl amines, ethoxyla	ated (CAS 6179	1-26-2)		
Aquatic				
Crustacea	EC50	Water flea (Daphnia magna)	3.7 - 7.2 mg/l, 48 hours	
Fish	LC50	Bluegill (Lepomis macrochirus)	1.1 - 1.6 mg/l, 96 hours	
* Estimates for product may I	be based on ad	ditional component data not shown.		
rsistence and degradability	No data is av	vailable on the degradability of this product.		
paccumulative potential	No data avai	No data available.		
obility in soil	No data available.			
her adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.			
3. Disposal consideratio	ons			
sposal of waste from sidues / unused products	This material and its container must be disposed of as hazardous waste. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.			
zardous waste code	D002: Waste	e Corrosive material [pH <=2 or =>12.5, or c	orrosive to steel]	
entaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or			

14. Transport information

disposal.

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DOT	
UN number	UN3264
UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric Acid RQ = 44643 LBS, Phosphoric Acid RQ = 135135 LBS)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
Packing group	II
	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	B2, IB2, T11, TP2, TP27
Packaging exceptions	154
Packaging non bulk	202
Packaging bulk	242
ΙΑΤΑ	
Not permitted for shipment by	air.
IMDG	
UN number	UN3264
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric Acid, Phosphoric Acid)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	I
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations	This product is a "Hazardou Standard, 29 CFR 1910.120	is Chemical" as defined by the OSHA Hazard Communication 00.
	Notification (40 CFR 707, Su	
Oxalic Acid (CAS 144-62		1.0 % One-Time Export Notification only.
	ulated Substances (29 CFR 1	1910.1001-1050)
Not listed. SARA 304 Emergency relea	ase notification	
Hydrochloric Acid (CAS		5000 LBS
, ,	Section 313 - Toxic Chemica	
Hydrochloric Acid (CAS	7647-01-0)	
CERCLA Hazardous Substa	ance List (40 CFR 302.4)	
Hydrochloric Acid (CAS		Listed.
Phosphoric Acid (CAS 7 CERCLA Hazardous Substa		Listed.
Hydrochloric Acid (CAS		5000 LBS
Phosphoric Acid (CAS		5000 LBS
Spills or releases resultir	ng in the loss of any ingredient	at or above its RQ require immediate notification to the National nergency Planning Committee.
Clean Air Act (CAA) Section	n 112 Hazardous Air Pollutar	nts (HAPs) List
Hydrochloric Acid (CAS		
Clean Air Act (CAA) Section	n 112(r) Accidental Release I	Prevention (40 CFR 68.130)
Hydrochloric Acid (CAS	7647-01-0)	
Safe Drinking Water Act (SDWA)	Not regulated.	
Drug Enforcement Adminis Code Number	stration (DEA). List 2, Essent	ial Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical
Hydrochloric Acid (CAS Drug Enforcement Adminis		6545 mpt Chemical Mixtures (21 CFR 1310.12(c))
Hydrochloric Acid (CAS DEA Exempt Chemical Mixt		20 %WV
Hydrochloric Acid (CAS	7647-01-0)	6545
Food and Drug Administration (FDA)	Not regulated.	
Superfund Amendments ar	nd Reauthorization Act of 198	86 (SARA)
Section 311/312 Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazardous substance	No	
S state regulations		
US. California. Candidate C (a))	hemicals List. Safer Consun	ner Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.
Hydrochloric Acid (CAS Phosphoric Acid (CAS 7		
		of Justice (California Health and Safety Code Section 11100)
Not listed.		A.4
-	d Community Right-to-Know	Act
Oxalic Acid (CAS 144-62 Phosphoric Acid (CAS 7 Hydrochloric Acid (CAS 7	664-38-2)	
Hydrochloric Acid (CAS		

US. Massachusetts RTK - Substance List

Hydrochloric Acid (CAS 7647-01-0) Oxalic Acid (CAS 144-62-7) Phosphoric Acid (CAS 7664-38-2)

US. Pennsylvania Worker and Community Right-to-Know Law

Hydrochloric Acid (CAS 7647-01-0) Phosphoric Acid (CAS 7664-38-2) Oxalic Acid (CAS 144-62-7)

US. Rhode Island RTK

Hydrochloric Acid (CAS 7647-01-0) Phosphoric Acid (CAS 7664-38-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Volatile organic compounds (VOC) regulations

VOC content (OTC)

EPA

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VOC content (40 CFR 51.100(s))	< 0.5 %
Consumer products (40 CFR 59, Subpt. C)	Not regulated
te	
Consumer products	Not regulated
VOC content (CA)	< 0.5 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

< 0.5 %

Issue date	06-11-2015
Prepared by	Allison Cho
Version #	01
Further information	Not available.
HMIS® ratings	Health: 3 Flammability: 0 Physical hazard: 0 Personal protection: D
NFPA ratings	Health: 3 Flammability: 0 Instability: 0
NFPA ratings	30

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