



SAFETY DATA SHEET

1. Identification

Product identifier Aluminox™ Pontoon & Aluminum Hull Cleaner

Other means of identification

Product code MK3132

Recommended use Cleaner for aluminum hulls

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name CRC Industries, Inc.

Address 885 Louis Dr.
Warminster, PA 18974 US

Telephone

General Information 215-674-4300

Technical Assistance 800-521-3168

Customer Service 800-272-4620

24-Hour Emergency 800-424-9300 (US)

(CHEMTREC) 703-527-3887 (International)

Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards Corrosive to metals Category 1

Health hazards Skin corrosion/irritation Category 1B

Serious eye damage/eye irritation Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May be corrosive to metals. Causes severe skin burns and eye damage.

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. Wear protective gloves/protective clothing/eye protection/face protection.

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 locked up. Store in corrosive resistant container with a resistant inner liner.

Disposal Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise classified (HNOC) None known.

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

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	90 - 100
Ammonium bifluoride		1341-49-7	1 - 5
Hydrochloric Acid		7647-01-0	1 - 5
Phosphoric Acid		7664-38-2	1 - 5

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 (CO ₂).
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.
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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

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

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. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. 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
Ammonium bifluoride (CAS 1341-49-7)	PEL	2.5 mg/m3
Hydrochloric Acid (CAS 7647-01-0)	Ceiling	7 mg/m3
Phosphoric Acid (CAS 7664-38-2)	PEL	5 ppm
		1 mg/m3

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value	Form
Ammonium bifluoride (CAS 1341-49-7)	TWA	2.5 mg/m3	Dust.

US. ACGIH Threshold Limit Values

Components	Type	Value
Ammonium bifluoride (CAS 1341-49-7)	TWA	2.5 mg/m3
Hydrochloric Acid (CAS 7647-01-0)	Ceiling	2 ppm
Phosphoric Acid (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ammonium bifluoride (CAS 1341-49-7)	TWA	2.5 mg/m3
Hydrochloric Acid (CAS 7647-01-0)	Ceiling	7 mg/m3
Phosphoric Acid (CAS 7664-38-2)	STEL	5 ppm 3 mg/m3
	TWA	1 mg/m3

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Ammonium bifluoride (CAS 1341-49-7)	3 mg/l	Fluoride	Urine	*
	2 mg/l	Fluoride	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates 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 should 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	Colorless.
Odor	Acid.
Odor threshold	Not available.
pH	< 1
Melting point/freezing point	-173.6 °F (-114.2 °C) estimated
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	None (Tag Closed Cup)
Evaporation rate	Similar to water.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	20.9 hPa estimated
Vapor density	Not available.
Relative density	1.05
Solubility (water)	Soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity (kinematic)	Not available.
Percent volatile	91 % 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.
Hazardous decomposition products	Hydrogen chloride. Phosgene.

11. Toxicological information

Information on likely routes of exposure

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.

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.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Aluminex™ Pontoon & Aluminum Hull Cleaner		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 20 mg/l
Oral		
LD50	Rat	> 2000 mg/kg

* Estimates for product may be based on additional component data 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

Ammonium bifluoride (CAS 1341-49-7)	3 Not classifiable as to carcinogenicity to humans.
Hydrochloric Acid (CAS 7647-01-0)	3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity 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
Aluminex™ Pontoon & Aluminum Hull Cleaner		
Aquatic		
Fish	LC50	Fish 9400 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

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other 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.

13. Disposal considerations

Disposal of waste from residues / 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.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]
Contaminated 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 disposal.

14. Transport information

DOT	
UN number	UN2922
UN proper shipping name	Corrosive liquids, toxic, n.o.s. (Hydrochloric Acid RQ = 166667 LBS, Phosphoric Acid RQ = 166667 LBS, Ammonium bifluoride RQ = 3333 LBS), Limited Quantity
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGI, II)
Label(s)	8, 6.1
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	B3, IB2, T7, TP2
Packaging exceptions	154
Packaging non bulk	202
Packaging bulk	243
IMDG	
UN number	UN2922
UN proper shipping name	CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrochloric Acid, Phosphoric Acid, Ammonium bifluoride), LIMITED QUANTITY
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGI, II)
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
IATA	
Not permitted for shipment by air.	

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Hydrochloric Acid (CAS 7647-01-0) 5000 LBS

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Ammonium bifluoride (CAS 1341-49-7)

Hydrochloric Acid (CAS 7647-01-0)

CERCLA Hazardous Substance List (40 CFR 302.4)

Ammonium bifluoride (CAS 1341-49-7) Listed.

Hydrochloric Acid (CAS 7647-01-0) Listed.

Phosphoric Acid (CAS 7664-38-2) Listed.

CERCLA Hazardous Substances: Reportable quantity

Ammonium bifluoride (CAS 1341-49-7) 100 LBS

Hydrochloric Acid (CAS 7647-01-0) 5000 LBS

Phosphoric Acid (CAS 7664-38-2) 5000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Hydrochloric Acid (CAS 7647-01-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Hydrochloric Acid (CAS 7647-01-0)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Hydrochloric Acid (CAS 7647-01-0) 6545

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Hydrochloric Acid (CAS 7647-01-0) 20 %WV

DEA Exempt Chemical Mixtures Code Number

Hydrochloric Acid (CAS 7647-01-0) 6545

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Phosphoric Acid (CAS 7664-38-2) High priority

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Immediate Hazard - Yes

Hazard categories Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Hydrochloric Acid (CAS 7647-01-0)

Phosphoric Acid (CAS 7664-38-2)

US. New Jersey Worker and Community Right-to-Know Act

Ammonium bifluoride (CAS 1341-49-7)

Phosphoric Acid (CAS 7664-38-2)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Ammonium bifluoride (CAS 1341-49-7)

Hydrochloric Acid (CAS 7647-01-0)

Phosphoric Acid (CAS 7664-38-2)

US. New Jersey Worker and Community Right-to-Know Act

Hydrochloric Acid (CAS 7647-01-0)

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

Hydrochloric Acid (CAS 7647-01-0)

Phosphoric Acid (CAS 7664-38-2)

US. Rhode Island RTK

Ammonium bifluoride (CAS 1341-49-7)

Hydrochloric Acid (CAS 7647-01-0)

Phosphoric Acid (CAS 7664-38-2)

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

Ammonium bifluoride (CAS 1341-49-7)

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**EPA****VOC content (40 CFR 51.100(s))** < 0.5 %**Consumer products (40 CFR 59, Subpt. C)** Not regulated**State****Consumer products** Not regulated**VOC content (CA)** < 0.5 %**VOC content (OTC)** < 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)	Yes
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

Issue date	06-11-2015
Revision date	09-15-2015
Prepared by	Allison Cho
Version #	02
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**Disclaimer**

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