



Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product Name: AC-2010

MSDS Revision: 0002

Description Alkaline Water-based Cleaner

Revision Date: 7/11/2014

Product Number: 0000840

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Aero Clean Technologies, LLC

1320 Stephenson Ave

Lynchburg, VA 24501

For More Information Call: 434-381-0699 (Monday-Friday 7:00-6:00)

In Case of Emergency Call: 765-271-0430 (24 Hours/Day, 7 Days/Week)

WHMIS Classification / Symbol:

E : Corrosive Material at (>1%)



Signal Word: Warning

Hazard Statements

H317 May cause an allergic skin reaction

Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P264 Wash...thoroughly after handling

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 IF IN EYES:

P331 Do NOT induce vomiting.

P338 Remove contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse.

2. COMPOSITION, INFORMATION ON INGREDIENTS (Not Intended As Specifications)

Description	CAS Number	Concentration
Urea	57-13-6	14 - 20
Ethylene Glycol Monobutyl Ether	111-76-2	3 - 7
Linear Alkyl, Aryl Sulphonic Acid	68584-22-5	0 - 2
Tetrasodium Ethylenediaminetetraacetate Tetrahydrate	64-02-8	0 - 2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

3. HAZARDS IDENTIFICATION

Overview

Material is corrosive and will burn eyes. Can cause skin defatting and irritation with prolonged exposure.

Inhalation may cause headache, nausea, dizziness. Prolonged exposure may lead to dermatitis. Ingestion may lead to vomiting. Severe overexposures may lead to coma and possible death due to respiratory failure.

Inhalation	Inhalation of product may cause headache, nausea, and dizziness.
Skin Contact	Can cause skin defatting and irritation with prolonged exposure.
Skin Absorption	None noted.
Eye Contact	Product contact to the eye may cause irritation, redness and pain. Product residues on fingers, hands or gloves may contact the eyes and cause eye irritation, redness and pain.
Ingestion	Ingestion of this product causes irritation of the mouth and throat. Ingestion may lead to vomiting and abdominal pain.
Other	None noted.

4. FIRST-AID MEASURES

General	If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM, OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.
Inhalation	Remove to fresh air and restore breathing if necessary. Seek medical attention.
Skin Contact	Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation persists.
Eye Contact	Immediately flush eyes with water for 15 minutes while holding eyelids open for maximum irrigation. Seek medical attention.
Ingestion	Seek immediate medical attention. DO NOT induce vomiting unless directed by medical personnel.
Physicians Note:	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE-FIGHTING MEASURES

Flash Point LE	None known	Flash Point UEL	None known	Auto Ignition:	None known	Boiling Point	> 121C (250F)
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Unusual Fire or Exposion Hazards	Decomposition products may include the following materials: <ul style="list-style-type: none"> • carbon oxides • other hydrocarbons
Sensitivity to Mechanical Impact	Not expected to be sensitive to mechanical impact.
Rate of Burning	Not determined.
Explosive Power	Not determined.
Sensitivity to Static Charge	Not applicable.
Extinguishing Media	Use an extinguishing agent suitable for the surrounding fire.
Instructions to Fire Fighters	No special instructions.
Fire Fighting Protective Equipmen	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Enviromental Precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).
Large Spill Handling	<ul style="list-style-type: none"> • Stop leak without risking safety. • Move containers from spill area. • Approach release from upwind. • Prevent entry into sewers, water ways, basements, or confined areas. • Wash spillages into an effluent treatment plant. If effluent treatment plant is not available then contain

and collect spillage with non-combustible, absorbent material (i.e. sand, earth, vermiculite, or diatomaceous earth) and place in container for disposal according to local regulations (see Section 13).

- Dispose of via a licensed waste disposal contractor.
- Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Small Spill Handling Stop leak if without risking personal or environmental well being. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

Handling Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Urea									
TWA	ACGIH		TWA	OSHA		TWA	NIOSH		
	STEL	CEILING		STEL	CEILING		STEL	CEILING	
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established	Not Established	Not Established	Not Established	Not Established
Ethylene Glycol Monobutyl Ether									
TWA	ACGIH		TWA	OSHA		TWA	NIOSH		
	STEL	CEILING		STEL	CEILING		STEL	CEILING	
20 ppm				50 ppm 240 mg/m ³			5 ppm 24 mg/m ³		
Linear Alkyl, Aryl Sulphonic Acid									
TWA	ACGIH		TWA	OSHA		TWA	NIOSH		
	STEL	CEILING		STEL	CEILING		STEL	CEILING	
Not Established	Not Established		Not Established	Not Established		Not Established	Not Established		
Tetrasodium Ethylenediaminetetraacetate Tetrahydrate									
TWA	ACGIH		TWA	OSHA		TWA	NIOSH		
	STEL	CEILING		STEL	CEILING		STEL	CEILING	

Personal Protective Equipment (PPE)



General PPE Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator

Hands	Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly affect glove durability; inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: NEOPRENE and NITRILE If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.
Eyes	Chemical splash goggles or face shield should be used. Safety Glasses do not offer enough protection from spray and splashing product.
Skin and Body	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Hygiene	Wash hands, forearms, and face thoroughly after handling chemical products prior to eating, smoking, using the lavatory, and at the end of the working periods. Appropriate procedures should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Density: 1.06 g/ml	
Appearance: Clear	pH: 12.0	
Color: Colorless to light amber	Viscosity:	
Odor: Mild	Solubility in Water: Mostly soluble	
Boiling Point: > 121C (250F)	Flash Point LEL: None known	Vapor Density: 1
Freezing Point: Not determined	Flash Point UEL: None known	Vapor Pressure: 10
Melting Point: Not determined	Auto Ignition: None known	Evaporation Rate: .5

10. STABILITY AND REACTIVITY

Stability	Yes
Conditions to Avoid	None known
Materials to Avoid	Strong oxidizing agents.
Decomposition	Carbon monoxide, Carbon Dioxide, and other hydrocarbons during combustion.
Polymerization	None known

11. TOXICOLOGICAL INFORMATION

Ethylene Glycol Monobutyl Ether		
Test Method	Dosage/Concentration	
LD50 (dermal, guinea pig)	> 2,000 mg/kg	
LD50 (oral, guinea pig)	1,200 mg/kg	
Tetrasodium Ethylenediaminetetraacetate Tetrahydrate		
Test Method	Dosage/Concentration	
LD50 (dermal, rabbit)	> 5,000 mg/kg	
LD50 (oral, rat)	> 1,780 and < 2,000 mg/kg	
Urea		
Test Method	Dosage/Concentration	
LD50 (oral, rat)	8471 mg/kg	

12. ECOLOGICAL INFORMATION

Tetrasodium Ethylenediaminetetraacetate Tetrahydrate		
Results	Species	Exposure
EC50, immobilization: 610 - 1,033 mg/l	Daphnia magna (Water flea)	24 hours

LC50, static test, 1592 mg/l	Lepomis macrochirus (Bluegill sunfish)	96 hours
Urea		
Results	Species	Exposure
LC50, 17500 mg/l	Poecilia reticulata (guppy)	96 hours
EC50, 3910 mg/L Fresh water	Daphnia magna - Water flea	48 hours

13. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environment agency for specific rules). Do not dump in sewers, any body of water, or on the ground.

Empty containers retain product residue and can be dangerous. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. Do not dispose of package until thoroughly washed out.

14. TRANSPORT INFORMATION

In accordance with ICAO/IATA/DOT/TDG

UN Number:

UN Proper Shipping Name NOT REGULATED, CLEANING COMPOUND NOI LIQUID

UN Class:

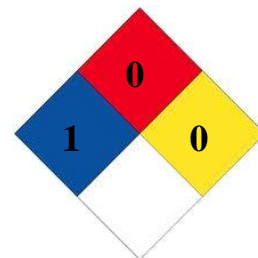
Package Group (DOT)

15. REGULATORY INFORMATION

All regulatory information is stated as provided by MSDS from manufacturer/distributor.

Ammonium Hydroxide
US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration
 AMMONIUM HYDROXIDE (CAS 1336-21-6) 1.0 %
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance
 AMMONIUM HYDROXIDE (CAS 1336-21-6) Listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)
 Hazard categories Immediate Hazard - Yes
Section 311 hazardous chemical: Yes
Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-,
SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 TITLE III (EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT) SECTIONS 311 AND 312
Delayed (Chronic) Health Hazard : Yes
Immediate (Acute) Health Hazard : Yes

16. OTHER INFORMATION



This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.