



# SAFETY DATA SHEET

Issue Date: 01-Jun-2010

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Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** ACE KLEAN HD

### Other means of identification

**SDS #** HDC

**UN/ID No** UN3266

**Other Information** Package type: 1, 5, 55 gal.

### Recommended use of the chemical and restrictions on use

**Recommended Use** Cleaning aluminum finned cooling and heating coils.

**Restrictions on Use** For professional use only.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Atlantic Chemical & Equipment Company

3471 Atlanta Industrial Parkway

Suite 200

Atlanta, GA 30331 USA

#### Emergency telephone number

**Company Phone Number** 404-505-6626

1-800-929-2436

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

### Signal Word

**Danger**

**Hazard Statements**

Harmful if swallowed

Causes severe skin burns and eye damage

**Appearance** Clear yellow liquid**Physical State** Liquid**Odor** slight glycol odor**Precautionary Statements – Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

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

**Precautionary Statements – Response**

Immediately call a POISON CENTER or doctor/physician

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 or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

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

Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Do NOT induce vomiting

Immediately call a POISON CENTER or doctor/physician

**Precautionary Statements – Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements – Disposal**

Dispose of in accordance with federal, state and local regulations

**Hazards not otherwise classified (HNOC)**

May be harmful in contact with skin

**Other Information**

Not Applicable

<b>3. COMPOSTION/INFORMATION ON INGREDIENTS</b>
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Chemical Name	CAS No	Weight-%
Potassium hydroxide	1310-58-3	<21
2-Butoxyethanol	111-76-2	<15
Tetrapotassium pyrophosphate	7320-34-5	<10
Sodium metasilicate pentahydrate	10213-79-3	<10

## 4. FIRST AID MEASURES

### First aid measures

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Inhalation</b>	Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Eye Contact</b>	Immediately flush with plenty of water for up to 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Drink plenty of water. Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Seek medical attention immediately.
<b>Skin Contact</b>	Neutralize with very diluted vinegar solution, wash with soap and water, apply skin cream. For large burns - GET IMMEDIATE MEDICAL ATTENTION.

### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Inhalation may cause irritation to nasal passages. Severe burns to exposed skin. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Ingestion may cause severe burns to mouth, throat or stomach.
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### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined

### Specific hazards arising from the chemical

Not determined

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Wear impervious to strong alkaline protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Use personal protective equipment as required. Wash thoroughly after handling.
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**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Neutralize with water and vinegar.

**Methods for cleaning up** For small spills: wash to drain after product is neutralized. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Avoid mixing with acids and soft metals. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store locked up. Keep container tightly closed in a dry and well-ventilated place.

**Incompatible materials** Acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

**Individual protection measures, such as personal protective equipment**

**Eye/face Protection** Use tight fitting, splash proof safety goggles. Contact lenses should not be worn when handling this material. Face Mask.

**Skin and Body Protection** Wear suitable protective clothing and footwear appropriate for the risk of exposure. Wear protective Neoprene™ gloves.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Slight glycol odor
<b>Appearance</b>	Clear yellow liquid	<b>Odor threshold</b>	Not determined
<b>Color</b>	Clear to yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	13.0-14.0	
Melting point/freezing point	Not determined	
Flash point	Not determined	
Evaporation rate	Not determined	
Flammability (solid, gas)	Not determined	
Flammability Limits in Air	Not determined	
Upper flammability limits	Not determined	
Lower flammability limits	Not determined	
Vapor pressure	Not determined	
Vapor density	Not determined	
Specific gravity	1.10-1.20	
Water solubility	Not determined	
Solubility in other solvents	Not determined	
Partition in other solvents	Not determined	
Partition coefficient	Not determined	
Autoignition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic viscosity	Not determined	
Explosive properties	Not determined	
Oxidizing properties	Not determined	

### Other Information

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

Product will react violently with the addition of incompatible materials.

**Hazardous polymerization**      Hazardous polymerization does not occur.

### Conditions to avoid

Incompatible materials. Keep out of reach of children.

### Incompatible materials

Acids.

### Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	May cause irritation to the mucous membranes and upper respiratory tract.
<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns. May be harmful in contact with skin.
<b>Ingestion</b>	Harmful if swallowed.

#### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	>90 mL/kg (Rat)	-	-
Potassium hydroxide 1310-58-3	214 mg/kg (Rat)	-	-
2-Butoxyethanol 111-76-2	470 mg/kg (Rat)	220 mg/kg (Rabbit) 2270 mg/kg (Rat)	2.21 mg/L (Rat) 4 h 450 ppm (Rat) 4 h
Tetrapotassium pyrophosphate 7320-34-5	-	>4640 mg/kg (Rabbit)	-
Sodium metasilicate pentahydrate 10213-79-3	847 mg/kg	-	-

### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol 111-76-2	A3	Group 3		

*IARC (International Agency for Research on Cancer)*

*Group 3 IARC components are "not classifiable as human carcinogens"*

### Numerical measures of toxicity – Product

Not determined

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	1115 mg/kg
ATEmix (dermal)	3135 mg/kg
ATEmix (inhalation-gas)	350000 mg/l
ATEmix (inhalation-dust/mist)	30.9 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life. Harmful to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganism	Crustacea
Potassium hydroxide 1310-58-3		80: 96 h Gambusia affinis mg/L LC50 static		
2-Butoxyethanol 111-76-2		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50		1698 - 1940: 24 h Daphnia magna mg/L EC50 >1000: 48 h Daphnia magna
Tetrapotassium pyrophosphate 7320-34-5		100: 96 h Oncorhynchus mykiss mg/L LC50		100: 48 h water flea mg/L EC50

### Persistence and degradability

Not determined

### Bioaccumulation

Not determined

### Mobility

Not determined

Chemical Name	Partition coefficient
Potassium hydroxide 1310-58-3	0.83
2-Butoxyethanol 111-76-2	0.81

### Other adverse effects

Not determined

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### **Contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

**DOT**

**UN/ID No** UN3266  
**Proper shipping name** Corrosive liquid, Basic, Inorganic n.o.s (Potassium hydroxide, Disodium trioxosilicate)  
**Hazard Class** 8  
**Packing Group** II  
**Reportable Quantity (RQ)** 1000 lbs (Potassium hydroxide)

**IATA**

**UN/ID No** UN3266  
**Proper shipping name** Corrosive liquid, Basic, Inorganic n.o.s (Potassium hydroxide, Disodium trioxosilicate)  
**Hazard Class** 8  
**Packing Group** II

**IMDG**

**UN/ID No** UN3266  
**Proper shipping name** Corrosive liquid, Basic, Inorganic n.o.s (Potassium hydroxide, Disodium trioxosilicate)  
**Hazard Class** 8  
**Packing Group** II

## 15. REGULATORY INFORMATION

**International Inventories**

Not determined

**Legend:***TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances***U.S. Federal Regulations**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
2-Butoxyethanol	111-76-2	<15	1.0

**SARA 311/312 Hazard Categories**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide 1310-58-3	1000 lbs			X
Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ		Reportable Quantity (RQ)
Potassium hydroxide 1310-58-3	1000 lbs			RQ 1000 lb final RQ RQ 454 kg final RQ

**U.S. State Regulations****California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.



**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium hydroxide 1310-58-3	X	X	X
2-Butoxyethanol 111-76-2	X	X	X
Sodium metasilicate pentahydrate 10213-79-3	X		X

**U.S. EPA Label Information****16. OTHER INFORMATION****NFPA****Health hazards**

Not determined

**Flammability**

Not determined

**Instability**

Not determined

**Special Hazards**

Not determined

**HMIS****Health hazards**

3

**Flammability**

0

**Physical hazards**

2

**Personal protection**

X

**Issue Date:**

21-Jun-2010

**Revision Date:**

03-Mar-2015

**Revision Note:**

Corrections

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**