SAFETY DATA SHEET

Issue Date: 10-Jun-2010 **Revision Date:** 11-Mar-2015 **Version** 1

1. IDENTIFICATION

Product Identifier
Product Name ACE SUPER D

Other means of identification
SDS # ASD

UN/ID No UN1814
Other Information Package type: 32oz., 1, 5, 55 gal.

Recommended use of the chemical and restrictions on use
Recommended Use Cleaning and brightening aluminum finned cooling and heating coils.
Restrictions on Use For professional use only. Product is a concentrate and should be diluted prior to use.

Details of the supplier of the safety data sheet

Manufacturer Address
Atlantic Chemical & Equipment Company
3471 Atlanta Industrial Parkway
Suite 200
Atlanta, GA 30331

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 orange liquid **Physical State** Liquid **Odor** Citrus

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
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth
Do NOT induce vomiting

Precautionary Statements – Storage
Store locked up
Keep containers tightly closed in a dry, cool and well-ventilated place

Precautionary Statements – Disposal
Dispose of in accordance with federal, state and local regulations

Hazards not otherwise classified (HNOC)
Not Applicable

Other Information
Harmful to aquatic life with long lasting effects
Harmful to aquatic life

3. COMPOSTION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sodium silicate	1344-09-8	<30
Potassium hydroxide	1310-58-3	<25
Sodium xylenesulfonate	1300-72-7	<18

4. FIRST AID MEASURES

First aid measures

General Advice Provide this SDS to medical personnel for treatment.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Eye Contact Immediately flush with plenty of water for up to 15 minutes. Immediate medical attention is required.

Ingestion 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.

Skin Contact 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

Symptoms Inhalation may cause irritation to nasal passages. Severe burns to exposed skin. Nausea. Blindness may occur.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

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
Avoid mixing with acids and soft metals.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Wash thoroughly after handling.

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)

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.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Keep containers tightly closed in a cool, well-ventilated place.

Packaging materials Do not store in aluminum drums.

Incompatible materials Acids. Soft metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m^3	(vacated) Ceiling: 2 mg/m^3	Ceiling: 2 mg/m^3

Appropriate engineering controls

Engineering Controls If vapors are detected, ventilate work area by opening windows and using exhaust fans. Always work with wind from behind.

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 impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. 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

Physical state Liquid
Appearance Clear orange liquid
Color Light orange
Odor Citrus
Odor threshold Not determined

Property	Values	Remarks • Method
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	1.135
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
This product will warm slightly with the addition of water.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Product will react violently with the addition of incompatible materials.

Conditions to avoid
Incompatible materials. Keep out of reach of children.

Incompatible materials
Acids. Soft metals.

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

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

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Sodium Silicate 1344-09-8	= 1153 mg/kg (Rat)	> 4640 mg/kg (Rabbit)	-
Potassium hydroxide 1310-58-3	214 mg/kg (Rat)	-	-
Sodium xylenesulfonate 1300-72-7	= 7200 mg/kg (Rat)	-	-
NP 9	= 1310 mg/kg (Rat)	= 2 mL/kg (Rabbit)	-

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 This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity – Product
Not determined

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral) 1154 mg/kg
ATEmix (dermal) 16841 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium Silicate 1344-09-8		301 - 478: 96 h Lepomis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi-static		216: 96 h Daphnia magna mg/L EC50
Potassium hydroxide 1310-58-3		80: 96 h Gambusia affinis mg/L LC50 static		

Persistence and degradability
Not determined

Bioaccumulation
Not determined

Mobility
Not determined

Chemical Name	Partition coefficient
Potassium hydroxide 1310-58-3	0.83

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.

Chemical Name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT

UN/ID No	UN1814
Proper shipping name	Potassium Hydroxide, Solution
Hazard Class	8
Packing Group	II
Reportable Quantity (RQ)	1000 lbs each (Sodium hydroxide, Potassium hydroxide)

IATA

UN/ID No	UN1814
Proper shipping name	Potassium Hydroxide, Solution
Hazard Class	8
Packing Group	II

IMDG

UN/ID No	UN1814
Proper shipping name	Potassium Hydroxide, Solution
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

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Potassium hydroxide 1310-58-3	1000 lb			X

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium hydroxide 1310-58-3	1000 lb		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

U.S. EPA Label Information

16. OTHER INFORMATION

NFPA	**Health hazards**	**Flammability**	**Instability**	**Special Hazards**
	Not determined	Not determined	Not determined	Not determined
HMIS	**Health hazards**	**Flammability**	**Physical hazards**	**Personal protection**
	3	0	2	X

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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