Safety Data Sheet

SECTION 1: IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name</th>
<th>ACS-CLN-090</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier Uses</td>
<td>Cleaner</td>
</tr>
<tr>
<td>Supplier</td>
<td>Advanced Chemical Service Inc.</td>
</tr>
<tr>
<td></td>
<td>3410 La Sierra Ave.,#F271</td>
</tr>
<tr>
<td></td>
<td>Riverside, CA 92503</td>
</tr>
<tr>
<td>Tel:</td>
<td>800-319-9227</td>
</tr>
</tbody>
</table>

Contact Person: 800-319-9227 / www.advancedchemicalservice.com

Emergency Telephone: 24-HOUR EMERGENCY TELEPHONE: INFOTRAC: 1-800-535-5053 INTERNATIONAL#: 1-352-323-3500

SECTION 2: HAZARDS IDENTIFICATION

Appearance: Liquid.
Color: Clear, amber liquid.
Odor: Sweet.

Pictogram(s)

Signal Word: Danger

Hazard Statements: H314 Causes severe skin burns and eye damage

Precautionary Statements:
P280 Wear protective gloves/ protective clothing/eye protection/face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician

Contains:
potassium hydroxide
disodium metasilicate

GHS Classification
Physical and Chemical Hazards: Not classified
Human Health: Skin Corr. 1B - H314
Environment: Not classified

OSHA Regulatory Status: This product is Hazardous under the OSHA Hazard communication Standard.

Inhalation: There may be shortness of breath with a burning sensation in the throat.
Ingestion: Do not ingest. Exposure to liquid product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract, and possible burns.
Skin contact: Corrosive! Can cause redness, pain, and severe skin burns.
Eye contact: Extreme irritation of eyes and mucous membranes, including burning and tearing. Causes serious eye damage.

Routes of Exposure: Unknown
SECTION 3: Composition/Information on Ingredients

| Composition Comments | Confidential business information has been removed without affecting the overall safety information on the safety data sheet. |

SECTION 4: FIRST AID MEASURES

| Description of first aid measures | General Information: General first aid, rest, warmth and fresh air. |

| Ingestion | Remove victim immediately from source of exposure. Keep the affected person warm and at rest. Get prompt medical attention. |

| Skin contact | Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing. |

| Eye contact | Do not rub eye. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Get medical attention immediately. Continue to rinse. Continue to rinse for at least 15 minutes. |

| Most important symptoms and effects, both acute and delayed | General Information: The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |

| Inhalation | There may be shortness of breath with a burning sensation in the throat. |

| Ingestion | Do not ingest. Exposure to liquid product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract, and possible burns. |

| Skin contact | Corrosive! Can cause redness, pain, and severe skin burns. |

| Eye contact | Extreme irritation of eyes and mucous membranes, including burning and tearing. Causes serious eye damage. |

| Routes of Exposure | Unknown |

| Notes To The Physician | Treat symptomatically. |

SECTION 5: Firefighting Measures

| Auto Ignition Temperature (°C) | No Information available. |

| Flammability Limit-Lower (%) | No Information available. |

| Flammability Limit-Upper (%) | No Information available. |

| Flashpoint | No Information available. |

| Extinguishing Media | Use fire-extinguishing media appropriate for surrounding materials. Water, foam, dry chemical or carbon dioxide. |

| Hazardous combustion products | No hazardous decomposition products. |

| Unusual Fire & Explosion Hazards | Dried residue can thermally decompose, giving off irritating and possibly toxic fumes. |

| Special Fire Fighting Procedures | Use water to cool containers exposed to a fire. Avoid breathing fire vapors. |

| Protective equipment for fire-fighters | Wear full protective clothing and self-contained breathing apparatus, suitable gloves and boots. |

SECTION 6: Accidental Release Measures

| Personal Precautions | For personal protection, see section 8. In case of inadequate ventilation, use respiratory protection. Do not smoke, use open fire or other sources of ignition. In case of spills, beware of slippery floors and surfaces. |

| Environmental Precautions | Keep out of drains, municipal sewers, open bodies of water and water course. |

| Spill Clean Up Methods | Restrict non-essential personnel from the area. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer. Place into chemical waste container for disposal according to local, state or federal regulations. Neutralize residue with lime or soda ash and flush spill area. DO NOT TOUCH SPILLED MATERIAL! Wash thoroughly after dealing with a spillage. |
SECTION 7: Handling and Storage

Handling
Use proper personal protection when handling. Provide good ventilation. Avoid contact with skin and eyes and clothing. Do not use contact lenses. Avoid inhalation of vapors and mists. Avoid prolonged or repeated contact. Do NOT ingest. Wash thoroughly after handling. Rinse container before disposal.

Usage Description
Store in a cool, dry, and well-ventilated place away from incompatible materials. Vent containers frequently, and more often in warm weather to relieve pressure. Keep container tightly closed when not in use. Do not get in eyes, on skin, or on clothing.

Storage Precautions
Store closed containers in a cool, dry, well-ventilated area away from incompatible materials. This product is stable under normal conditions of handling and storage. Avoid cold temperatures. The recommended storage temperature is above 32°F, preferably at room temperature (70°F). Under ideal storage conditions, the shelf life is one (1) year. It is recommended that product be retested if stored for more than six (6) months. Keep away from oxidizing materials. Keep in a tightly closed container and store it in a cool, dry, ventilated area. Protect container against physical damage, direct sunlight, and freezing.

Specific End Use(s)
The identified uses are in section 1 of this Safety Data Sheet.

SECTION 8: Exposure Controls/Personal Protection

Protective Equipment

Ingredient Comments
No information for the control parameters

Process Conditions
Provide eyewash, quick drench.

Engineering Measures
Provide adequate ventilation.

Respiratory Equipment
Use of respirator protection is not generally required.

Hand Protection
When handling this product, it is recommended to wear chemical resistant gloves. The choice of suitable protective gloves depends on work conditions and what chemicals are handled, but we have positive experience with gloves made of Rubber. Use rubber or plastic gloves to minimize skin contact.

Eye Protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene Measures
DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance
Liquid.

Color
Clear, amber liquid.

Odor
Sweet.

Odor Threshold - Lower
No Information available.

Odor Threshold - Upper
No Information available.

pH-Value, Conc. Solution
13.7

Melting point
31.8 °F

Initial boiling point and boiling range
212.0 °F

Flashpoint
No Information available.

Evaporation rate
No Information available.
Flammability State No Information available.
Flammability Limit - Lower (%) No Information available.
Flammability Limit - Upper (%) No Information available.
Vapor pressure 23.8 mm Hg 0.0
Vapor Density (air=1) No Information available.
Relative density No Information available.
Bulk Density No Information available.
Solubility Completely soluble in water.
Decomposition temperature No Information available.
Partition coefficient; n-octanol/water No Information available.
Auto Ignition Temperature (°C) No Information available.
Viscosity No Information available.
Explosive Properties No information available.
Oxidizing properties No Information available.
Molecular Weight Not known.
Volatile Organic Compound No Information available.

SECTION 10: Stability and Reactivity

Reactivity Reactions may occur with strong oxidizing materials and strong acids.
Stability This product is stable at ambient temperatures and atmospheric pressures.
Hazardous Polymerization Hazardous polymerization is not expected to occur under normal temperatures and pressures.
Hazardous Decomposition Products None under normal conditions.
Conditions to Avoid Avoid extreme temperatures and storing in large quantities and for long periods of time.
Materials to Avoid Keep away from strong oxidizing materials and strong acids.

SECTION 11: Toxicological Information

Toxicological Information No Information available.
Acute Toxicity (Oral LD50) >4037.00mg/kg Rat
Acute Toxicity (Dermal LD50) >1586.00mg/kg Rabbit
Acute Toxicity (Inhalation LC50) No Information available.
Skin Corrosion/Irritation No Information available.
Respiratory Sensitization No Information available.
Skin Sensitization No Information available.
Reproductive Toxicity: No Information available.
Germ Cell Mutagenicity:
Genotoxicity - In Vitro No Information available.
Genotoxicity - In Vivo
Carcinogenicity:
Carcinogenicity No Information available.
NTP - Carcinogenicity The product and its components are not listed.
OSHA - Carcinogenicity
The product and its components are not listed.
IARC Carcinogenicity
The product and its components are not listed.

Specific Target Organ Toxicity - Single Exposure:
STOT - Single Exposure No Information available.
Specific Target Organ Toxicity - Repeated Exposure:
STOT - Repeated Exposure No Information available.

<table>
<thead>
<tr>
<th>Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
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<tbody>
<tr>
<td>potassium hydroxide</td>
<td>284mg/kg</td>
<td>Rat</td>
<td></td>
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SECTION 12: Ecological Information

Eco toxicity No Information available.
Acute Toxicity - Fish LC50 96 Hours >195.00ppm Onchorhynchus mykiss (Rainbow Trout)
Acute Toxicity - Aquatic Invertebrates LC50 96 Hours >1980.00ppm Daphnia magna
Acute Toxicity - Aquatic Plants No Information available.
Degradability No information available.
Bio accumulative Potential No Information available.
Mobility Completely soluble in water.

Results of PBT and vPvB Assessment The product does not contain any PBT or vPvB Substances.
Other Adverse Effects None known.

SECTION 13: Disposal Considerations

Waste Management When handling waste, consideration should be made to the safety precautions applying to handling of the product.
Disposal Methods Dispose of waste and residues in accordance with local authority requirements. Do NOT dump into any sewers, on the ground or into any body of water. Rinse containers before disposal. Since emptied containers contain product residue, follow label warnings even after container is emptied.

SECTION 14: Transport Information

UN No. (DOT/TDG) 1760 - CORROSIVE LIQUID, (Potassium Hydroxide)
UN No. (IMDG) 1760 - CORROSIVE LIQUID, (Potassium Hydroxide)
UN No. (ICAO) 1760 - Corrosive liquid (Potassium Hydroxide)
DOT Proper Shipping Name 1760 - CORROSIVE LIQUID, (Potassium Hydroxide)
TDG Proper Shipping Name 1760 - CORROSIVE LIQUID, (Potassium Hydroxide)
DOT Hazard Class 8
DOT Hazard Label Class 8 - Corrosive
TDG Class 8
TDG Label(s) 8
IMDG Class 8
ICAO Class 8
Transport Labels
DOT Pack Group II
IMDG Pack Group II
Air Pack Group II
EMS F-A, S-B
Environmentally Hazardous Substance/Marine Pollutant No

SECTION 15: Regulatory Information

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
The Following ingredients are listed

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The Following ingredients are listed potassium hydroxide

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
The Following ingredients are listed

SARA 313 Emission Reporting
The Following ingredients are listed

CAA Accidental Release Prevention
The Following ingredients are listed

OSHA Highly Hazardous Chemicals
The Following ingredients are listed

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
The Following ingredients are listed

California Air Toxics “Hot Spots” (A-I)
The Following ingredients are listed

California Air Toxics “Hot Spots” (A-II)
The Following ingredients are listed

Massachusetts “Right To Know” List
The Following ingredients are listed potassium hydroxide

Rhode Island “Right To Know” List
The Following ingredients are listed potassium hydroxide

Minnesota “Right To Know” List
The Following ingredients are listed potassium hydroxide
Poly(oxy-1,2-ethanediyl),1-hydroxy-1-hydroxy- Ethane-1,2-diol, ethoxylated octan-1-ol

New Jersey “Right To Know” List
The Following ingredients are listed potassium hydroxide

Pennsylvania “Right To Know” List
The Following ingredients are listed potassium hydroxide
decan-1-ol
octan-1-ol
SECTION 16: Other Information

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Health</td>
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<tr>
<td>Flammability</td>
<td>0</td>
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<tr>
<td>Physical Hazard</td>
<td>0</td>
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<tr>
<td>Personal Protection</td>
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Revision Comments: No Information available.
Revision Date: 5/15/2015
Revision: 1

Disclaimer
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