

# SAFETY DATA SHEET

**SECTION 1 - IDENTIFICATION**

**Product Identifier:** HD COIL CLEANER AND BRIGHTENER  
**Product Use:** Acid cleaner

**Product Code:** 643

**KW SOLUTIONS**  
 2524 ACME CT  
 TURLOCK, CA 95380  
 (209)632-6900

**24 Hr. Emergency Tel.#:** 800-424-9300

**SECTION 2 - HAZARDS IDENTIFICATION**

**Classification of the Substance or Mixture:**

Skin Corrosion - Category 1  
 Serious Eye Damage - Category 1



**Signal Word:** DANGER

**Hazard Statements:**

Causes severe skin burns and eye damage  
 Causes serious eye damage

**Precautionary Statements:**

**Prevention**

Wash hands 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):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
**IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician  
 Wash contaminated clothing before reuse.

**Storage**

Store locked up.

**Disposal**

Dispose of contents/container in accordance with local regulations.

**Hazards not Otherwise Classified:**

No other hazards classified.

**SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

| Ingredient          | Synonym | CAS Number | Concentration |
|---------------------|---------|------------|---------------|
| AMMONIUM BIFLUORIDE | N/A     | 1341-49-7  | 8-13%         |
| SULFURIC ACID       | N/A     | 7664-93-9  | 20-25%        |

**SECTION 4 - FIRST-AID MEASURES**

**Inhalation:** Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

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**Skin Contact:** Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower with a flushing duration of 30 minutes. Immediately call POISON CENTER/doctor. Wash contaminated clothing before re-use.

**Eye Contact:** Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 30 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. Immediately call a POISON CENTER/doctor.

**Ingestion:** Immediately call a POISON CENTER/doctor. Rinse mouth. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

**Most Important Symptoms and Effects, both Acute and Delayed:** Causes severe skin burns and eye damage, burning of the mouth, throat, and esophagus.

**Indication of any Immediate Medical Attention and Special Treatment Needed:** Treat symptomatically

## SECTION 5 - FIRE-FIGHTING MEASURES

**Extinguishing Media:** Use water spray, powder, foam, carbon dioxide.

**Special hazards arising from the substance or mixture:** Hot or molten material can react violently with water. Can react with certain metals, such as aluminum, to generate flammable Hydrogen gas.

**Flammability classification (OSHA 29 CFR 1910.106) (Hazcom 2012):** Non flammable

**Hazardous Combustion Products:** Potentially dangerous phosphorus oxides.

**Special protective equipment and precautions for firefighters:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**Methods and materials for containment and cleaning up:** SMALL SPILLS (less than 1 gallon): Neutralize with soda ash or cover with dry earth, sand or other non combustible material, place into loosely covered plastic containers for later disposal. If neutralized, material can be diluted into drain. LARGE SPILL: Restrict access to area until completion of clean up. Prevent liquid from entering sewers or waterways. Stop or reduce leak if safe to do so. Dike with inert material (sand, earth, etc.). Collect into plastic containers for disposal. Ensure adequate decontamination of tools and equipment following clean up.

**Special spill response procedures:** Prevent from entering sewers, waterways, or low areas.

## SECTION 7 - HANDLING AND STORAGE

**Precautions for Safe Handling:** Use EXTREME care when diluting with water. Always add acid to water. Wear at least chemical resistant gloves and eye protection, face shield, and chemical resistant garments when handling, moving or using this product. Do not contaminate water, food, or feed by storage or disposal.

**Conditions for Safe Storage:** Keep product in tightly closed container when not in use. Do not drop, roll, or skid drum. Store in a cool, dry, well-ventilated area away from heat or open flame.

**Incompatible Materials:** Reducing agents, wood, paper and other combustibles, iron and other heavy metals, copper alloys and caustic.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| Chemical Identity | CAS Number | Type | Exposure Limit Values | Source |
|-------------------|------------|------|-----------------------|--------|
| SULFURIC ACID     | 7664-93-9  | TWA  | 0.2 mg/m3             | ACGIH  |
|                   |            | PEL  | 1 mg/m3               | NIOSH  |
|                   |            | REL  | 1 mg/m3               | OSHA   |

**Ventilation and engineering measures:** Forced air, local exhaust, or open air is adequate.

**Respiratory Protection:** Not a respiratory irritant unless dealing with a mist form, then wear appropriate NIOSH respirator.

**Skin Protection:** Wear chemical resistant gloves and chemical resistant garments when handling, wash garments before re-use.

**Eye/Face Protection:** Wear safety glasses, goggles and/or face shield to prevent eye contact.

**Other Protective Equipment:** Eye wash facility and emergency shower should be in close proximity.

**General Hygiene Conditions:** Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industry hygiene and safety practice.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Colorless clear liquid.

**Odor:** Odorless.

**pH:** <2.0

**Melting/Freezing point:** No information available.

**Initial boiling point and boiling range:** No information available.

**Flammability (solid, gas):** Non flammable.

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Specific gravity: 1.20 g/mL

Solubility in water: Complete

Decomposition temperature: No information available.

Viscosity: 15-30 cSt at 20°C / 68°F

### SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** Reactive with bases, metals, reducing agents and combustible materials

**Chemical Stability:** Stable under normal conditions

**Possibility of Hazardous Reactions:** May react with incompatible materials

**Conditions to Avoid:** Incompatible materials

**Incompatible Materials:** Reactive with bases, metals, reducing agents and combustible materials

**Hazardous Decomposition Products:** Potentially dangerous phosphorous oxides.

### SECTION 11 - TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure:**

Routes of entry - inhalation: YES

Routes of entry - skin & eye: YES

Routes of entry - ingestion: YES

Routes of entry - skin absorption: YES

**Potential Health Effects:**

**Signs and symptoms of short term (acute) exposure:**

**Inhalation:** Inhalation of the mist may produce severe irritation of respiratory tract, characterized by coughing, choking, shortness of breath, headaches, dizziness, nausea, weakness and/or drowsiness.

**Ingestion:** Corrosive! Swallowing causes severe burns of mouth, throat, and stomach. Severe scarring of tissue, corrosion, permanent tissue destruction and death may result. Symptoms may include severe pain, nausea, vomiting, diarrhea, shock, hemorrhaging and/or fall in blood pressure. Damage may appear days after exposure.

**Skin:** Corrosive! Contact with skin causes irritation or severe burns and scarring with greater exposures.

**Eye:** Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

Potential Chronic Health Effects:

Mutagenicity: Not known to have mutagenic effects in humans or animals.

Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.

Reproductive effects: No known reproductive effects.

Sensitization to material: Not a known sensitizer.

Specific target organ effects: Irritating and corrosive to mucous membranes.

**Toxicological data:** The calculated ATE values for this mixture are:

ATE oral = >5000 mg/kg

ATE dermal = No information available.

ATE inhalation = No information available.

### SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: May be harmful to aquatic life.

Persistence and degradability: Not expected to persist. Readily biodegradable.

Bioaccumulation potential: Not expected to bioaccumulate.

Mobility in soil: No information available.

### SECTION 13 - DISPOSAL CONSIDERATIONS

**Handling for disposal:** Do not contaminate water, food, or feed by storage and/or disposal. When handling refer to protective measures listed in sections 7 and 8. Empty residue from containers, DO NOT rinse container.

**Method of disposal:** Dispose of in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

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**RCRA:** If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of: Corrosivity D002

### SECTION 14 - TRANSPORTATION INFORMATION

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Please note the GHS and DOT Standards are NOT identical and therefore can have varying classifications

**US 49 CFR/DOT/IATA/IMDG Information:**

UN No.: 1760

UN Proper Shipping Name: Corrosive liquid n.o.s. (Sulfuric Acid)

Transportation hazard class(es): 8

Packing Group: II

Environmental hazards: Not a Marine Pollutant

### SECTION 15 - REGULATORY INFORMATION

**US Federal Information:**

TSCA information: All components are listed on the TSCA inventory.

US CERCLA reportable quantity (RQ): Sulfuric acid has a RQ of 1000 pounds of pure chemical. Ammonium bifluoride has a RQ of 100 pounds.

SARA Title III: Acute Health Hazard

### SECTION 16 - OTHER INFORMATION

**Legend:**

**SARA:** The Superfund Amendments and Reauthorization Act

**RCRA:** Resource Conservation and Recovery Act

**TSCA:** Toxic Substances Control Act

**CFR:** Code of Federal Regulations

**DOT:** Department of Transportation

**ATE:** Acute Toxicity Estimate

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