



SAFETY DATA SHEET

SECTION 1

MATERIAL IDENTIFICATION

PRODUCT NAME / DESCRIPTION: CLEAN-ACT® DUZ-ALL

DISTRIBUTED / MANUFACTURED BY:
Advanced Chemical Technologies, Inc.
9608 N Robinson
Oklahoma City, OK 73114

Date: 9/23/2015 (Version 1)
Phone: (405) 843-2585
Emergency Phone: (800) 255-3924

FUNCTION: Industrial Water Treatment

SECTION 2

HAZARD IDENTIFICATION

CLASSIFICATION:

| | |
|--|------------|
| Substance Corrosive to Metal: | Category 1 |
| Acute Toxicity: Oral: | Category 3 |
| Skin corrosion/irritation: | Category 1 |
| Serious Eye damage/eye irritation: | Category 1 |
| Respiratory sensitizer: | Category 1 |
| Aspiration: | Category 1 |
| Aquatic Toxicity: Acute: | Category 2 |
| Target Organ Specific Toxicity: Acute: | Category 1 |
| Target Organ Specific Toxicity: Chronic: | Category 1 |

SIGNAL WORD:

DANGER!

HAZARD STATEMENTS:

| | |
|---|--|
| May be corrosive to metals | Toxic if swallowed |
| Causes severe skin burns and eye damage | Causes serious eye damage |
| May cause allergy or asthma symptoms or breathing difficulties if inhaled | Causes damage to organs through prolonged or repeated exposure |
| Toxic to aquatic life | Causes damage to organs |
| May be fatal if swallowed and enters airways | |



PRECAUTIONARY STATEMENTS:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Avoid breathing dust, fumes, gas, mist, vapors or spray.
Use only outdoors or in a well ventilated area.
Wash all exposed skin thoroughly after handling.

Avoid release to the environment.
Store in a corrosive resistant container.
Toxicity:
See section 11

Less than 5% of this mixture consists of ingredients with unknown acute toxicity.

SECTION 3

HEALTH HAZARDS

| Chemical Name | CAS No. | % W/W |
|-------------------------------------|----------------|--------------|
| Ethanolamine | 141-43-5 | < 1 |
| Propanol, -2 | 7732-18-5 | < 1 |
| Citric Acid | 77-92-9 | < 10 |
| Glycolic Acid | 79-14-1 | < 20 |
| Hydrogen Chloride | 7647-01-0 | < 10 |
| Phosphoric Acid | 7664-38-2 | < 20 |
| Sulfamic Acid (Proprietary Formula) | 5329-14-6 | < 5 |

SECTION 4

FIRST AID MEASURES

Potential acute health effects:

| | |
|---|--|
| Eyes: | May cause severe burns and/or damage. |
| Skin: | May cause severe burns and/or damage. |
| Inhalation: | May cause severe irritation. |
| Ingestion: | May cause irritation, corrosion, ulceration, nausea and vomiting. |
| Medical conditions aggravated by exposure: | Can cause lung damage. |
| Eye contact: | Immediately flush eyes with cool running water. Lift and separate eye lids while flushing with plenty of water for at least 15 minutes. Get medical attention. |
| Skin contact: | Wash with soap and water. Get medical attention if irritation occurs. Wash clothing before reuse. Destroy contaminated shoes. |
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms develop. |
| Ingestion: | No NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Give plenty of water. |

SECTION 5

FIRE FIGHTING MEASURES

| | |
|--|---|
| Fire hazard classification (OSHA/NFPA): | 0 |
| Extinguishing media: | As required for fire being fought. |
| Special fire fighting procedures: | Use self-contained breathing apparatus. |
| Hazardous combustion products: | None known. |

SECTION 6

ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

| | |
|--------------------------------|---|
| Containment procedures: | Wear protective clothing as described in Section 8 of this Safety Data Sheet. Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during clean up. |
| Clean up procedures: | Do not allow the spilled product to enter public drainage system or open water sources. Sweep up or gather material and place in appropriate container for disposal. Wash spill area thoroughly. Wear appropriate protective equipment during clean up. Dispose of collected material according to regulations. |

SECTION 7**HANDLING AND STORAGE**

| | |
|------------------|--|
| Handling: | Avoid contact with eyes, skin and clothing. Do not take internally. For industrial use only. Wash after handling. Do not breathe dust, vapor or gas. |
| Storage: | Keep this and all chemicals out of reach of children. Keep away from heat, sparks, and open flames. Prevent spills. Keep container tightly closed and in a cool, well ventilated place away from incompatible materials. Empty product containers may contain product residue, do not reuse. |

SECTION 8**EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | |
|----------------------------------|--|
| Ventilation system: | Always keep exposure below permissible exposure limits. In general, dilution ventilation is a satisfactory health control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered. |
| Airborne exposure limits: | None established. |
| Personal protection: | As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1920.132), employees must perform a Hazard Assessment of all workplaces to determine the need for, and selection of, proper protective equipment for each task performed. |
| Eyes: | Wear face shield, safety glasses or chemical goggles. |
| Hands and skin: | For prolonged or repeated handling, use impervious gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended. |
| Respiratory: | If ventilation is not sufficient, appropriate NIOSH/MSHA respiratory protection must be provided. |
| Work practices: | Eye wash fountain and emergency showers are recommended. |

SECTION 9**PHYSICAL AND CHEMICAL PROPERTIES**

| | |
|------------------------------------|-------------------|
| Appearance: | Liquid |
| Color: | Red |
| Odor: | No data available |
| Odor Threshold: | No data available |
| pH: | < 1 |
| Boiling point: | 212° F |
| Melting point: | < 32° F |
| Flash Point: | No data available |
| Evaporation Rate (Butylacetate=1): | No data available |
| Flammability (solid, gas): | Non-Flammable |
| Upper Explosion Limit (UEL): | No data available |
| Lower Explosion Limit (LEL): | No data available |
| Vapor Pressure: | No data available |
| Vapor Density: | No data available |
| Specific gravity (Water=1): | 1.20+/-0.05 |
| Solubility water: | Complete |
| Partition coefficient: | No data available |
| Auto ignition Temperature: | No data available |
| Decomposition Temperature: | No data available |
| Viscosity (CPS): | No data available |

SECTION 10**STABILITY AND REACTIVITY**

Stability: This product is stable under normal temperatures and pressures.
 Incompatibility: Strong alkalis, strong oxidizers, cyanides and sulfide salts.
 Decomposition products: None known.
 Conditions to avoid: None known.

SECTION 11**TOXICOLOGICAL INFORMATION**

| Raw Material | Test | Result | Route | Species |
|-------------------------------|------|------------|-------|---------|
| Citric Acid (77-92-9) | LD50 | 5400 mg/kg | Oral | Rat |
| Glycolic Acid (79-14-1) | LD50 | 1950 mg/kg | Oral | Rat |
| Hydrogen Chloride (7647-01-0) | LD50 | 700 mg/kg | Oral | Rat |
| Phosphoric Acid (7664-38-2) | LD50 | 1530 mg/kg | Oral | Rat |
| Sulfamic Acid (5329-14-6) | LD50 | 3160 mg/kg | Oral | Rat |

See Section 4 for symptoms

Carcinogenicity: No known carcinogens.
Mutagenicity: No known mutagens.
Reproductive Toxins: No known reproductive toxins.

SECTION 12**ECOLOGICAL INFORMATION**

| Raw Material | Test | Result | Time | Species |
|---------------------------|------|-----------|-------|---------|
| Citric Acid (77-92-9) | LC50 | 440 mg/L | | Fish |
| Sulfamic Acid (5329-14-6) | LC50 | 55.8 mg/L | 96 hr | Minnow |

Persistence and degradability: No data available
Bioaccumulation potential: No data available
Mobility in soil: No data available

SECTION 13**DISPOSAL CONSIDERATIONS**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management conditions. State and local disposal regulations may differ from federal disposal regulations. Dispose container and unused contents in accordance with federal, state and local requirements.

SECTION 14**TRANSPORT INFORMATION**

CORROSIVE LIQUIDS, n.o.s.
 (Contains Citric Acid, Glycolic Acid and Phosphoric Acid)
 8, UN1760, PG III
 CORROSIVE LABEL/PLACARD REQUIRED

SECTION 15**REGULATORY INFORMATION****US FEDERAL REGULATIONS**

SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):
SARA 302: Extremely hazardous substances list: NA
SARA 312: Hazard category: NA
SARA 313: Toxic chemicals list: NA

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT): NA

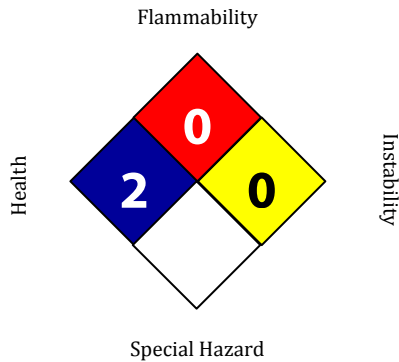
RCRA (RESOURCE CONSERVATION AND RECOVERY ACT) LISTED HAZARDOUS WASTES:
CWA (CLEAN WATER ACT) LISTED SUBSTANCES:
FDA (FOOD AND DRUG ADMINISTRATION):
TSCA (TOXIC SUBSTANCES CONTROL ACT):

NA
NA
NA
All ingredients are listed.

SECTION 16

OTHER INFORMATION

NFPA:



HMIS III:

| | |
|------------------------|----------|
| HEALTH | 2 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 0 |

- 0 = not significant**
- 1 = slight**
- 2 = moderate**
- 3 = high**
- 4 = extreme**
- * = chronic**

THIS INFORMATION IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.