

QUIP SERVICE SELLS QUIP

QUIP LABORATORIES INCORPORATED  
1500 EASTLAWN AVENUE  
WILMINGTON, DE 19802  
(302) 761-2600

EMERGENCY NUMBER: 1-800-424-CHEM

MATERIAL SAFETY DATA SHEET

IDENTIFICATION: ACIDULATE 28 ORGANIC ACID CLEANING COMPOUND  
PRODUCT CODE:

HAZARD RATING:

4 = EXTREME	TOXICITY = 3
3 = HIGH	FIRE = 0
2 = MODERATE	REACTIVE = 2
1 = SLIGHT	SPECIAL = 0
0 = INSIGNIFICANT	

COMPOSITIONAL INFORMATION

HAZARDOUS INGREDIENTS	%	TLV
CITRIC ACID (C.A.S. # 77-92-9)	< 30	N/A
HYDROXYACETIC ACID (C.A.S. # 79-14-1)		

PHYSICAL DATA

APPEARANCE: CLEAR PINKISH-RED  
SPECIFIC GRAVITY: 1.22  
SOLUBILITY IN WATER: SOLUBLE  
VOLATILE BY VOLUME: N/A  
ODOR: MILD CHEMICAL  
PH: 1.0  
EVAPORATION RATE: 1  
BOILING POINT: 212 F - 99 C

FIRE & EXPLOSION DATA

FLASH POINT: N/A  
FLAMMABILITY: N/A  
EXTINGUISHING MEDIA: NONE REQUIRED.  
SPECIAL FIRE FIGHTING PROCEDURES: NONE  
UNUSUAL FIRE OR EXPLOSION HAZARD: EXERCISE CAUTION WHEN FIGHTING FIRES INVOLVING CHEMICAL SUBSTANCES. RESPIRATORY PROTECTION IS REQUIRED.

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HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: (MEDICAL CONDITIONS AGGRAVATED/TARGET ORGAN EFFECTS):  
A. ACUTE (PRIMARY ROUTE OF EXPOSURE) EYES AND SKIN. PRODUCT MAY BE MILDLY IRRITATING TO EYES AND SKIN.  
INHALATION: MISTING MAY PRODUCE SOME RESPIRATORY IRRITATION.  
INGESTION: PRACTICALLY NONTOXIC IF SWALLOWED.  
B. SUBCHRONIC, CHRONIC, OTHER: NONE KNOWN.

EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT: FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR 15 MINUTES. GET IMMEDIATE MEDICAL.

SKIN CONTACT: IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. WASH WITH MILD SOAP AND WATER. IF IRRITATION DEVELOPS, GET MEDICAL ATTENTION.

INHALATION: REMOVE TO FRESH AIR, IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION IF IRRITATION PERSISTS OR SYMPTOMS DEVELOP LATER.

INGESTION: DO NOT INDUCE VOMITING. GIVE GLASS OF WATER OR MILK TO DILUTE. GET IMMEDIATE MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

SPECIAL PROTECTION INFORMATION

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PROTECTIVE GLOVES: RUBBER OR PLASTIC.  
EYE PROTECTION: CHEMICAL SPLASH GOGGLES OR FACE SHIELD IF NEEDED TO PREVENT CONTACT.  
RESPIRATORY PROTECTION: GENERALLY NOT REQUIRED UNLESS HEAVY MISTING OCCURS.  
LOCAL EXHAUST: MECHANICAL VENTILATION TO MAINTAIN VAPORS AND MISTS.  
OTHER EQUIPMENT: NONE.

REACTIVITY DATA

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INCOMPATIBLE MATERIALS: STRONG OXIDIZERS; WILL CORRODE COPPER, ZINC, ALUMINUM OR THEIR ALLOYS IN HIGH CONCENTRATIONS.  
STABILITY: CONDITIONS TO AVOID: NONE KNOWN.  
HAZARDOUS POLYMERIZATION: N/A  
HAZARDOUS DECOMPOSITION PRODUCTS: UNKNOWN.

SPILL OR LEAK PROCEDURES

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SPILL RESPONSE: CONTAIN SPILL. ABSORB INTO SODIUM BICARBONATE. FLUSH RESIDUE TO THE SEWER WITH PLENTY OF WATER.

WASTE DISPOSAL METHODS: DISPOSE OF IN A LANDFILL OR FLUSH TO A SANITARY SEWER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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SPECIAL INFORMATION

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: MILD ACID SOLUTION. AVOID CONTACT WITH EYES, SKIN OR CLOTHING. WEAR CHEMICAL SPLASH GOGGLES AND RUBBER GLOVES WHEN HANDLING. KEEP CONTAINER CLOSED WHEN NOT IN USE.

ADDITIONAL INFORMATION: READ AND OBSERVE LABEL PRECAUTIONS.

PREPARED BY: T.B. HIDEELL  
DATE: 8/8/95

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CORRECT. NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE.

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