Esma-GP E589

Alkaline Ultrasonic Cleaner (Concentrate)

DESCRIPTION: Esma-GP E589 is a mildly alkaline blended detergent. When used in conjunction with Esma ultrasonic cleaning and rinsing units, Esma-GP E589 will aid in the removal of oils, dirt, grime, particulates, residues, fluxes, chemicals and solvents, etc.

Esma-GP E589 is designed for use in industrial ultrasonic cleaners and washers. Esma-GP E589 is suitable for use on stainless steel, not recommended on brass or aluminum alloys. Esma-GP E589 offers convenience and economy as a concentrated liquid cleaner and is suitable for automatic chemical feeding. Esma-GP E589 is free-rinsing and safe to use due to its mild alkalinity. Esma-GP E589 does not contain dyes, perfumes, or preservatives for complete rinsing of instruments and equipment

PROPERTIES:

Appearance	Clear/Slight Green
pH (100%)	10.5 – 10.8
Odor	Mild
Foaming	Low
Rinsing	Complete
Lbs./Gal	10.51 (Gravity: 1.26)

DIRECTIONS:

For use in ultrasonic tanks dilute to 5% - 10% solution (6 oz. per gallon)

For use in automatic ultrasonic wash machines dilute 1:128 (1 oz. per gallon)

Temperature: Ambient - **200°F**

PRECAUTIONS:

May cause irritation to the eyes and skin upon contact.
AVOID EYE CONTACT
Wear goggles or safety glasses, wash thoroughly after handling. Fatal if swallowed. Keep out of reach of children. Refer to MSDS.

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General Purpose Cleaner E589

Emergency telephone: Chemtrec 800-424-9300 Product information: 800-276-2466

Prepared by: Paul Beezhold Date: 5/28/2015

SECTION 1 - PRODUCT IDENTIFICATION

Product Name: General Purpose Cleaner E589
Chemical family: Detergent Blend
C A S number: Not applicable
Formula: Trade secret

SECTION 2 - HAZARD IDENTIFICATION

Acute toxicity: Data below are based on Ethylenediamine tetraacetic acid

Potential Acute Health Effects:
Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Severe over-exposure can result in death.
Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells.
TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

SECTION 3 - HAZARDOUS INGREDIENTS

Common name: Ethylenediamine Tetraacetic Acid NA Salt < 21 % by weight
C A S #: 64-02-8

Common name: Sodium Glycolate < 2 % by weight
C A S #: 2836-32-0

Common name: Nitrilotriacetic Acid Trisodium Salt < 1 % by weight
C A S #: 5064-31-3

Toxicological Data on Ingredients: Ethylenediamine tetraacetic acid: ORAL (LD50): Acute: 30 mg/kg [Mouse].

SECTION 4 - FIRST AID MEASURES

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

SECTION 5 - FIREFIGHTING MEASURES

Flash point:	None
Auto-ignition temperature:	Not available
Flammability limits:	Not available
Extinguishing media:	None required
Special firefighting procedures:	None required
Fire/explosion hazards:	Not available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Small Spill:
Small Spill: Absorb with suitable absorbent such as sand or vermiculite.

Large Spill: Stop leak at source and contain spill with dike made of inert material such as sand or diatomaceous earth. Pump material to suitable container for possible reuse.

Solid spill: Sweep up and return to container.

EPA hazardous substance reportable quantity: Not applicable

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing vapors and mists. Avoid direct or prolonged contact with skin and eyes. In cold weather, liquids may stratify and freeze. This does not damage the product. If freezing occurs, thaw and remix before using. Frozen material may be thawed in a warm room. Avoid localized overheating. Vent drums while heating. Mix thoroughly to assure homogeneity. Handle with care. Wash thoroughly after handling.

Storage Requirements: Keep container closed. Store in an area that is dry and well-ventilated, away from incompatible materials (see section 10). For Industrial and commercial use only!

Disposal: Dispose of with flammable liquid waste in accordance with all federal, state, and local regulations.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection. None required.
Ventilation I Local Exhaust: General room ventilation.
Ventilation / Mechanical Recommendations: None required.
Skin Protection: Vinyl or rubber protective gloves.
Eye Protection: Goggles or face shield.
Other Protective Equipment: Vinyl apron (optional).
Exposure Guidelines: See section 2 for ACGIH recommendations for each hazardous ingredient.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid	**Odor:**	Mild solvent odor
Boiling point:	388^0 F/198^0 C	**Vapor pressure:**	Not available
Vapor density (Air = 1):	Not available	**Solubility in water:**	Complete
Specific gravity (Water = 1):	1.26	**pH of solution:**	10.08

SECTION 10- STABILITY AND REACTIVITY

Stability: Stable
Hazardous polymerization: Will not occur
Conditions to avoid: Avoid contact with hot solutions; splashing solutions, proplonged skin contact
Incompatible materials: Acids, Oxidizers
Hazardous decomposition products: None

SECTION 11 - TOXICOLOGY
Carcinogenicity: Not listed by any agency.
Mutagenicity: Not found to be a mutagenic.
Reproductive: No data available.
Sensitization: Not considered a sensitizer

Stability: Stable
Hazardous polymerization: Will not occur
Conditions to avoid: Avoid contact with hot solutions; splashing solutions, prolonged skin contact
Incompatible materials: Strong bases, Oxidizers
Hazardous decomposition products: None

SECTION 12 - ECOLOGICAL INFORMATION
Exotoxicological Information: No data found for this blended product.
Exotoxicological Information (as Ethylenediamine Tetraacetic Acid):
Ecotoxicity: Fish: Channel catfish: LC50 = 129-159 mg/L; 96Hr; UnspecifiedFish: Rainbow trout: LC50 = 340 mg/L; 24Hr; UnspecifiedFish: Bluegill/Sunfish: LC50 = 129-159 mg/L; 96Hr; UnspecifiedFish: Fathead Minnow: 100% Lethal = 750 ppm; 96 Hr; Static bioassayWater flea Daphnia: LC50 > 100 ppm; 96 Hr; Static bioassay If released to soil, EDTA is expected to complex with trace metals and alkaline earth metals present in the soil, thereby causing an increase in the total solubility of the metals. EDTA may eventually predominate as the Fe(III) chelate in acidic soils and as the Ca chelate in alkaline soils. Biodegradation of EDTA in aerobic soils is the dominant removal mechanism, although biodegradation in anaerobic soils is negligible. glycine. EDTA is not expected to bioaccumulate in aquatic organisms, adsorb to suspended solids or sediments or volatilize from water surfaces.
Environmental: EDTA and its chelates are expected to leach readily through soil and significant volatilization from soil is not expected. If released to water, EDTA is expected to complex with trace metals and alkaline earth metals. Biodegradation of EDTA is expected to take place relatively slowly under aerobic conditions and to be negligible under anaerobic conditions. Cometabolism has been suggested as the mechanism for EDTA biodegradation. EDTA may react with photochemically generated hydroxyl radicals (half-life 229 days) and it may photodegrade.
Physical: Compounds identified as possible biodegradation products of the ammonium ferric chelate of EDTA are as follows: ethylenediamine triacetic acid (ED3A), iminodiacetic acid (IDA), N,N-ethylenediamine diacetic acid (N,N-EDDA), N,N'-EDDA, ethylenediamine monoacetic acid (EDMA), nitrilotriacetic acid (NTA) and glycine. The following photodegradation products of Fe(III)-EDTA have been identified: carbon monoxide, formaldehyde, ED3A, N,N-EDDA, N,N'-EDDA, IDA, EDMA and glycine.
Other: None.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Whatever cannot be salvaged or recycled should be handled a hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approver waste facility.
Follow local, state and federal regulations for disposal.

SECTION 14 - REGULATORY INFORMATION

TSCA (Toxic Substances Control Act) Status - TSCA (United States) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a): This product contains Glycol Ether(s) which, although included as a broad category on the CERCLA hazardous substance list, has not been assigned a reportable quantity.

SARA 302 Components - 40 CFR 355 Appendix A: none

SARA 3111312 Classification - 40 CFR 370.2:
Immediate health hazard, delayed health hazard: (as Diethylene glycol n-butyl ether) acute, chronic (as Triethanolamine)

SECTION 15 - OTHER INFORMATION

The NFPA Rating : HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0
NFPA hazard degree designation 704: 4 = extreme, 3 = high, 2 = moderate, 1 = slight, 0 = none.

Revision Date : 5/28/2015

Information and data compiled to compose this SDS is correct to the best of our knowledge as of the printed date, and is offered solely for your consideration, investigation, and verification..