



## Betman Cleaner E785

### Alkaline Ultrasonic Cleaner (Concentrate)

**DESCRIPTION:** Esma-Betman Cleaner E785 is a mildly alkaline blended detergent. When used in conjunction with Esma ultrasonic cleaning and rinsing units, Esma-Betman Cleaner will aid in the removal of oils, dirt, grime, particulates, residues, fluxes, chemicals and solvents, etc.

Esma-Betman Cleaner is a non-foaming cleaning agent designed for use in industrial ultrasonic cleaners and washers. This product is suitable for use on stainless steel, not recommended on brass or aluminum alloys. Esma-Betman Cleaner offers convenience and economy as a concentrated liquid cleaner and is suitable for automatic chemical feeding. Esma-Betman Cleaner is free-rinsing and safe to use due to its mild alkalinity. Esma-Betman Cleaner 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% 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.



ESMA Incorporated  
450 Taft Drive  
South Holland, IL 60473  
800-276-2466

# SAFETY DATA SHEET

## Section 1- Product Identification and Use

Product Name: Betman Cleaner

Product Identification Number: E785

Product Use: Detergent Solution

Manufacturer's Name: Esma, Inc.

450 W. Taft Drive

South Holland, IL 60473

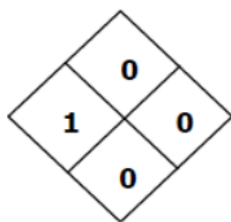
1-800-246-2466

Emergency Telephone Numbers— US/North America: Chemtrec 800-262-8200 24 hrs everyday

International: 800-276-2466

## Section 2 - Hazardous Identification

Form : Liquid Color : Clear/Slight Green



### NFPA/HMIS Rating:

Health = 1 = slight

Fire, Reactivity, and Special 0 = minimal

### Potential Health Effects

**Eye Contact:** May cause severe damage and even blindness

**Skin Contact:** No adverse effects expected under typical use conditions. Prolonged exposure may cause dryness. Chemically sensitive individuals may experience mild irritation.

**Ingestion:** Can result in damage to mucous membranes and deep tissues.

**Inhalation:** No adverse effects expected under typical use conditions. Adequate ventilation should be present for prolonged usage in small enclosed areas which can cause irritation and damage to nasal/respiratory passages

## Section 3 - Hazardous Ingredients

Ingredients	CAS	%
Ethylenediamine Tetraacetic Acid NA Salt	64-02-8	>25%
Sodium Glycolate	2836-32-0	>2%
Nitrilotriacetic Acid Trisodium Salt	5064-31-3	>1%
Sodium Hydroxide	1310-73-2	>1%

## Section 4 - First Aid Measures

**Eye Contact:** Immediately flush contacted area repeatedly with water for at least 15 minutes, holding eyelids open. Contact a physician for treatment.

**Skin Contact:** Immediately flush contacted area repeatedly with water for at least 15 minutes. If irritation persists, contact a physician for treatment. Clean contaminated clothing before reuse.

**Inhalation:** Inhalation is not an expected route of exposure. If respiratory irritation or distress occurs, remove victim to fresh air. If irritation persists, seek medical attention.

**Ingestion:** Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give 1-2 glasses of water to drink, if conscious and alert.

**Notes to physician :** No Data

## Section 5 - Firefighting Measures

**Flammability**—No

**Flash Point**—N/A

**Explosive Limit (% by Volume)**- N/A

**Auto Ignition Temp.**—No Data

Hazardous Combustion Products (may form)

Ammonia, Carbon Dioxide, Carbon Monoxide, Nitrogen oxides, various Hydrocarbons

**Explosion Data—Sensitivity to Impact**—N/A

**Sensitivity to Static Discharge**—N/A

## Section 6 - Accidental Release Measures

**Personal Precautions:** See section 8 – personal protection.

**Environmental Precautions:** Do not allow into open waterways and ground water systems.

**Method for Clean Up:** Dilute with water and rinse into sanitary sewer system or soak up with inert absorbent material.

## Section 7 - Handling And Storage

**Handling:** Keep container tightly closed. Ensure adequate ventilation. Keep out of reach of children

Leak and Spill Procedure—Absorb liquid on Vermiculite, Floor Absorbent or other absorbent material.

**Waste Disposal**—Dispose according to federal, provincial/state, and local regulations

**Handling Procedures**—Persons must wear proper personal protective equipment.

**Storage Requirements**—Store away from incompatible materials.

## Section 8 - Exposure Controls/Personal Protection

**Personal Protective Equipment:** Gloves—Rubber, Neoprene

**Eyes**—Chemical Splash Goggles

**Clothing**—Lab Coat

## Section 9 - Physical And Chemical Properties

**Physical State**—Liquid

**Odor Threshold**—N/A

**Specific Vapor Density**—No Data

**Evaporation Rate**—Slower than Ether

**Percent Volatiles** 42%

**Odor and Appearance**—Clear/Slight Green

**Vapor Pressure**—14mm Hg at 68.00 F

**Specific Gravity**—1.26

**Boiling Point**—217 degrees F

**PH**- 10.8

## Section 10 - Stability And Reactivity

**Stability:** Stable

**Hazardous polymerization:** Will not occur

**Conditions to avoid:** Elevated temperatures; enclosed areas; flame and spark sources

**Incompatible materials:** Oxidizers, strong acids and alkalis, halogenated solvents

**Hazardous decomposition products:** Various carbon and sulfur oxides

## SECTION 11 - TOXICOLOGY

**Acute Toxicity:** Oral LD50 (rat) > 5 g/kg body weight

Dermal LD50 (rabbit) > 5 g/kg body weight

Toxicity calculated from ingredients using OECD SERIES ON TESTING AND ASSESSMENT Number 33

**Carcinogens:** No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.

## Section 12 - Ecological Information

**Hazard to wild mammals:** Low, based on toxicology profile

**Hazard to avian species:** Low, based on toxicology profile

**Hazard to aquatic organisms:** Low, based on toxicology profile

**Chemical Fate Information:** Readily Biodegradable per OECD 301D, Closed Bottle Test

## 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 as a hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility.

Follow local, state and federal regulations for disposal

## Section 14 - Transportation Information

**U.S. Department of Transportation (DOT) / Canadian TDG:** Not Regulated

**IMO / IDMG:** Not classified as Dangerous

**ICAO/ IATA:** Not classified as Dangerous

**ADR/RID:** Not classified as Dangerous

**U.N. Number** Not Required

**Proper Shipping Name:** Detergent Solution

**Hazard Class:** Non-Hazardous

**Marine Pollutant:** No

## Section 15 - Regulatory Information

### SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

No SARA Hazards

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm limit

## Section 16 - Other Information

The HMIS Rating : HEALTH: 1    FLAMMABILITY: 0    REACTIVITY: 0    SPECIAL: 0

NFPA hazard degree designation 704: 4 = extreme, 3 = high, 2 = moderate, 1 = slight, 0 = none.

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