



Esma-Shine E105

Ultrasonic Instrument Cleaner (Concentrate)

DESCRIPTION: Esma-Shine E105 is a mildly alkaline blended detergent. When used in conjunction with Esma Ultrasonic cleaning and rinsing units, Esma-Shine E105 will aid in the removal of the baked on particulates which give instruments a dull finish. Esma-Shine E105 will not only clean your instruments it will help bring back the shine and luster of newer instruments.

Esma-Shine E105 is designed for use in industrial ultrasonic cleaners and washers. Esma-GP Esma-Shine E105 is suitable for use on stainless steel instruments, not recommended on brass or aluminum alloys. Esma-Shine E105 offers convenience and economy as a concentrated liquid cleaner and is suitable for automatic chemical feeding. Esma-Shine E105 is free-rinsing and safe to use due to its mild alkalinity. Esma-Shine E105 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)
 (* If using the Esma E789 machine, use 3 – 6 oz. per wash cycle. For difficult soils use 6 – 9 oz. per cycle.)

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

MATERIAL SAFETY DATA SHEET

Section 1- Product Identification and Use

Product Identifier—Esma-Shine

Product Identification Number—E105

Product Use—Cleaning Compound

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: Chemtrec 703-527-3887

Section 2 - Composition/Information on Ingredients

Ingredients	CAS	%
Sequestrial Agents		under 60%
32% water	7732-18-5	
21% Ethylenediamine Tetraacetic Acid NA Salt	64-02-8	
2% Sodium Glycolate	2836-32-0	
1% Unknown Material		
1% Nitrilotriacetic Acid Trisodium Salt	5064-31-3	
1% Sodium Hydroxide	1310-73-2	
Phosphates	7778-53-2	under 5%
Non Ionic Surfactant	9016-45-9	under 3%
Mild Wetting Agent		under 3%
Neutral Catalysts		under 2%

Section 3 Physical Data

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 4 - Fire and Explosion Data

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 5 - Reactivity Data

Chemical Stability—Stable

Incompatibility—Alum, copper, reactive metals

Hazardous Decomposition

May form: --Ammonia, Carbon Dioxide, Carbon Monoxide, nitrogen oxides, various hydrocarbons.

Hazardous Polymerization: Product will not undergo hazardous polymerization.

Section 6 - Toxicological Properties

Route of Entry - Eyes, Skin/Skin Absorption, Breathing, Swallowing

Effects of Acute Overexposure -

Eyes - May cause severe damage and even blindness.

Skin - Skin absorption is possible, exposure may cause irritation and possible ulceration.

Breathing - Fumes can cause irritation and damage to nasal/respiratory passages.

Swallowing - Can result in damage to mucous membranes and deep tissues.

Effects of Chronic Exposure - Chronic irritation of the eyes and chronic inflammation of nose, throat and lungs.

Exposure Limits—No exposure limits established.

Irritancy of Product—Skin, Eyes, Nose, and Throat

Sensitization to Product—N/A

Carcinogenicity—NO

Teratogenicity—N/A

Reproductive Toxicity—NO

Mutagenicity—NO

Synergistic Products—N/A

Section 7 - Preventive Measures

Personal Protective Equipment—

Gloves—Rubber, Neoprene

Eyes—Chemical Splash Goggles

Clothing—Lab Coat

Engineering Controls—Mechanical Ventilation Sufficient

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.

Special Shipping Information—

DOT Information—49CFR172.101

-DOT Description—Non -Regulated by D.O.T.

Section 8 - First Aid Measures

Skin—Immediately flush exposed area with running water for at least 15 minutes; if symptoms develop, get medical help; remove contaminated clothing and launder prior to reuse; discard contaminated shoes.

Eyes—Immediately flush with large amounts of running water for at least 15 minutes, lifting upper and lower lids. Get immediate medical attention; if physician unavailable continue flushing with water; do not use chemical antidote.

Swallowing—Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Breathed—Move individual to fresh air; if breathing difficult administer oxygen; if breathing has stopped, give artificial respiration; keep person warm, quiet, and get immediate medical help.

NOTE TO PHYSICIANS—No Data.

Section 9 - Other Information

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Section 10- Preparation Date of MSDS

Prepared by—Tim Beezhold Op/Mgr

708-331-1855

Nov. 27, 1996