

OLCO STAGE #2

TECHNICAL DATA

OLCO STAGE #2 is premium grade citric acid cleaner designed for subsequent cleaning, de-reusting and burnishing a wide range of high level metal components.

OLCO STAGE #2 is used at the rate of 2 ounces per gallon of water added to the cleaning system.. Heavier contamination will require higher dilution rates.

PHYSICAL DATA:

PHYSICAL FORM	LIQUID
ODOR	NON/SPECIFIC
SOLUBILITY	COMPLETE
COLOR	BLUE
SPECIFIC GRAVITY	1.15
PH WORKING SOLUTION	3.8
FOAM	LOW
WATER SOFTENING	GOOD
EMULSIFICATION	EXCELLENT

HMIS HEALTH 2, FLAMMABILITY 0, REACTIVITY 0, GLOVES & GOGGLES

In case of emergency call:

OLIVER CHEMICAL CO., INC.

1-888-541-OLCO 6526

24 hr. # (800) 424-9300 CHEMTREC

WARNING: EYE & SKIN IRRITANT.

Contact with EYES can cause tissue damage and irritation. Should contact occur flush eyes with water for 10 minutes. Use Boric Acid eye wash solution if available. If irritation persists get medical attention.

Should contact with SKIN occur wash affected areas with soapy water. Remove contaminated clothing and wash before reuse.

GOGGLES SHOULD BE WORN WHEN HANDLING THIS PRODUCT.

This material contains Citric Acid (CAS Reg. No. 0077-92-9) which is identified as a hazardous chemical under the criteria of OSHA Hazard Communication Standard (29CFR. 1910.1200).

WASTE DISPOSAL This product is biodegradable. Should questions concerning disposal arise consult your local MSD. Requirements and restrictions often vary from state to state.

Manufactured By
OLIVER CHEMICAL CO., INC.
2908 SPRING GROVE AVE.
CINCINNATI, OHIO 45225
PH 1-888-541- 6526

MATERIAL SAFETY DATA SHEET

Oliver Chemical Company, Inc.

2908 Spring Grove Avenue
Cincinnati, Ohio 45225

H.M.I.S.
HEALTH 2
FLAMMABILITY 0
REACTIVITY 0
GOGGLES

Date:1/10/2009
MSDS Number: MC 138
Phone 1-888-541-OLCO
24-Hour Emergency Telephone
1-800-424-9300 CHEMTREC

1. PRODUCT IDENTIFICATION

PRODUCT NAME: **OLCO STAGE #2**

DOT PROPER SHIPPING NAME: Compounds, cleaning liquid, n.o.s.

2. HAZARDOUS INGREDIENTS

Hazardous Components (Specific Chemical Identity)	CAS No	% WGT	OSHA PEL	ACGIH TLV	Other Limits
Citric acid	77-92-9	<6	None Est.	None est.	Rabbit Skin-500 mg/24 hr. eye-0.75 mg/24 hr

3. PHYSICAL DATA

Vapor Pressure (mm. Hg.): Nonvolatile
Vapor Density (air=1): Nonvolatile
Solubility in water: Complete
Appearance and Odor :Blue color, non-specific scent

Specific Gravity (H₂O =1): 1.15
Melting Point: -6° C
Evaporation Rate: Nonvolatile
(butyl acetate = 1)

4. FIRE AND EXPLOSION DATA

Flash Point: Above 180°C

Flammable Limits: No relevant information found

Extinguishing Media: water spray, alcohol foam, CO₂

Special Fire Fighting Procedures: Use NIOSH/MSHA approved self-contained breathing apparatus in areas where this material is involved in a fire.

Unusual Fire and Explosion Hazards: Protective clothing for skin and eye protection should be worn to protect against acidic chemicals.

5. REACTIVITY DATA

Conditions contributing to instability: Under normal conditions this product is stable.

Incompatibility: Do not mix with alkaline products, sulfides and sulfites which could release toxic gases.

Use caution in mixing with strong bases because high heat of reaction can generate high temperatures.

Hazardous Decomposition Products: None

6. HEALTH HAZARD INFORMATION

Route(s) of entry: Eyes, skin, and ingestion

Health Hazards: Acute: Causes eye burns, and may irritate skin

Chronic: Occupational exposure to this material has not been reported to cause significant adverse health effects when recommended safety precautions are followed.

This product has a low vapor pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. This product however, can be irritating to the respiratory track if inhaled as a mist or if the material is vaporized. Dermal contact is expected to be the primary route of exposure to this product. This product is considered corrosive to the eyes and skin, but may not produce immediate burning sensation upon skin contact, delaying the awareness of the worker that contact has occurred.

Signs and symptoms of exposure: Burning skin and eyes.

Carcinogenicity: Not known to be carcinogenic or mutagenic.

Medical conditions generally aggravated by exposure: Sensitive skin

Emergency and first aid procedures--Eyes: Object is to flush material out **immediately** then seek medical attention. **Immediately** flush eyes with large amounts of water for at least fifteen minutes holding lids apart to ensure flushing of the entire surface. Washing eyes within one minute is essential to achieve maximum effectiveness. Seek medical attention if irritation persists. **Skin:** Wash with plenty of water for fifteen minutes. Remove contaminated clothing and wash before reuse. Footwear should be decontaminated before reuse. Seek medical attention if symptoms are present. **Ingestion: Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting.** Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear. Seek medical attention immediately.

7. ENVIRONMENTAL PROCEDURES

Steps to be take in case material is released or spilled: Using appropriate protection (impervious gloves, coveralls, boots, goggles, etc.) contain spill. Flush with potable water .Neutralize remaining traces with baking soda.

Waste disposal Method: Due to widespread variance in disposal regulations, consult federal, state, and local regulatory agencies for proper disposal of this product.

Precautions to be taken in handling and storing: Good industrial hygiene practices should be adhered to when handling and storing this product. Avoid contact with undiluted product.

8. INDUSTRIAL HYGIENE CONTROL MEASURES

Respiratory Protection: Where required use only NIOSH/MSHA approved respirator following manufactures recommendation where mist or spray of concentrate may be generated.

Ventilation: Use local ventilation where spray or mists of concentrate may be generated.

Eyes: Chemical splash goggles and face shield should be worn when working with this product.

Protective Gloves: Gloves coated with rubber, synthetic elastomers, PVC, or other impervious material should be worn when handling this product to minimize skin contact.

Other protective clothing or equipment: Standard work clothes should be worn. Wash soiled clothing in soap and water and dry before reuse. Eyewash facilities should be accessible.

This Material Safety Data Sheet was prepared in accordance with 29 CFR 1910.1200. All information, recommendations and suggestions appearing herein concerning our product are based upon tests and data believed to be reliable, however it is the user's responsibility to determine the safety, toxicity and suitability for their own use of the product described herein. Since actual use by others is beyond our control, no guarantee expressed or implied is made by Oliver Chemical Company, Inc. as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does Oliver Chemical Company, Inc. assume any liability arising out of use by others of the product referred herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.