



PRODUCT SPECIFICATION REPORT

FS FORMULA 4489™ Foaming Acid Cleaner



DESCRIPTION

A concentrated non-fuming, high-foaming acid cleaner designed to remove hard water and protein scale from food processing equipment. Brightens aluminum, galvanized, and stainless steel. Contains a blend of non-fuming mineral acids and wetting agents.

FEATURES

- Built-in-foamer
- Effective
- Brightens
- Can be used on most paints
- Biodegradable
- U.S.D.A. authorized
- Color-coded

BENEFITS

- Eliminates the need for additional “boosters” usually required to produce high, stable foam.
- Quickly solubilizes and removes hard water and protein scale from food processing equipment.
- Excellent for renewing original brightness on stainless steel, aluminum, and galvanized surfaces.
- Will not harm most paints when used as directed.
- All detergents and wetting agents are completely biodegradable.
- Authorized as an acid cleaner in all departments of federally-inspected meat and poultry plants.
- Label is printed black (acid cleaner) for easy use with other color-coded Zep food systems products.

NOTE: DO NOT use acid products on highly polished metal surfaces as irreversible damage may occur. If contact should occur, flush immediately with water.

APPLICATIONS

Excellent for removal of protein and calcium scale in canneries, seafood processing plants, wineries, vegetable processing, institutional kitchens, breweries, supermarkets. Cleans and brightens stainless steel, aluminum, and galvanized.

Bakeries
Bottling Plants
Eating & Drinking Facilities

Dairy Farms
Eating & Drinking Establishments
Egg Processing Plants

Meat & Poultry Processing Plants
Nursing Homes & Hospitals
Sanitary Services

COMPANION PRODUCTS

Zep Bakery Pan Cleaner, Zep Concentrated Glass Cleaner, Zep FS Antimicrobial Hand Cleaner, Zep FS Pot Scrub, Zep FS Egg Wash, Zep Persoan, Zep Instant Hand Sanitizer, Zep Paper Towels and Towel Dispenser, Zep Trash Receptacles, Zep Trash Bags

SPECIFICATIONS

Physical Form	Thin, water-based liquid	Density/Specific	10.43lbs/gal -1.25
Color	Clear, colorless	Flash Point (TCC)	None
Odor	Mild	Shelf Life	1 year minimum
pH (Concentrate)	1.0 to 1.15	D.O.T. Shipping Label	Corrosive
(1% solution)	1.5 to 2.0		

PACKAGING

Gallons
Drums



PRODUCT LABEL

PROD. #2400
1097

FS FORMULA 4489™ Foaming Acid Cleaner

ZEP FS FORMULA 4489™ FOAMING ACID

PROD. #2400
1097D



A concentrated non-fuming, high-foaming acid cleaner designed to remove hard water and protein scale from food processing equipment. It also brightens metals such as aluminum, galvanized, and stainless steel. Authorized by U.S.D.A. for use in Federally inspected meat and poultry plants.

DIRECTIONS:

For Removal of Mineral and Protein Scale from Equipment: Dilute 1 part ZEP FS FORMULA 4489 with 32 to 48 parts water (3-4 oz./gal.). Apply as a foam, through a foam generating device, to surface to be cleaned. Let soak for 5 to 10 minutes, scrub if needed, and rinse thoroughly with water. Do not allow foam to dry on surface; rewet if necessary.

To Brighten Aluminum Galvanized, or Stainless Steel: Dilute 1 part ZEP FS FORMULA 4489 with 16 to 32 parts water (48 oz./gal.). Apply as a foam, through a foam generating device, to surface to be cleaned. Allow to remain, scrubbing intermittently, until desired degree of brightness is obtained. Rinse thoroughly with water.

NOTE: DO NOT use acid products on highly polished metal surfaces as irreversible damage may occur, if contact should occur, flush immediately with water.

BIODEGRADABLE: All detergents used in the manufacture of this product are biodegradable.

Zep advocates limiting exposure to all chemical products. Wear tight-fitting, splash-proof safety goggles during product use and when eye contact is possible, especially contact lens wearers. Wear rubber neoprene, nitrile, or other resistant gloves and acid resistant footwear during use. Remove contaminated clothing promptly and DO NOT rewear until thoroughly cleaned. After handling, always wash hands thoroughly with soap and water.

FIRST AID:

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

SKIN: Immediately flush contaminated skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

INHALATION: Move exposed person to fresh air. If irritation persists, get medical attention immediately.

INGESTION: If this product is swallowed, DO NOT induce vomiting. If affected person is conscious, give plenty of water to drink. Get medical attention at once.

DISPOSAL AND/OR SPILL INFORMATION: As with all cleaning and maintenance procedures, run-off from the cleaning or maintenance process should be diverted to a collection vessel or, where permitted, to a sanitary sewer and not allowed to soak into the ground or enter a storm sewer. If this product is spilled or contaminated and cannot be used, creating the need for disposal, absorb product on an inert absorbent material, such as Zep-O-Zorb or Zep Super Sorbent and deposit in a clean, sealable, D.O.T. specification container for disposal as a hazardous waste. Thoroughly clean area with detergent solution and rinse area well with water.

STORAGE: Store tightly-closed container in dry area at temperatures between 40°F (4°C) and 120°F (49°C).

ZEP MANUFACTURING COMPANY
ATLANTA, GA 30301

A Division of Acuity Specialty Products Group, Inc.
CLEAN ACROSS AMERICA
AND THROUGHOUT THE WORLD™



BEFORE USING THIS PRODUCT,
PLEASE READ THIS ENTIRE LABEL.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL AND INSTITUTIONAL
USE ONLY
NOT FOR HOUSEHOLD USE OR RESALE

PRECAUCION

AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

This product is designed exclusively for industrial and institutional use by trained, professional maintenance personnel. Label directions and precautions must be followed exactly. Zep Manufacturing Company will not be responsible for any injury, loss, or damage if product is used in any manner not in compliance with label directions, or if precautions are not observed.

HMS RATINGS

HEALTH	3	4 EXTREME 3 SERIOUS
FLAMMABILITY	0	2 MODERATE 1 SLIGHT
REACTIVITY	0	0 MINIMAL
PERSONAL PROTECTION EQUIPMENT	D	Goggles, Gloves, Apron Boots

DANGER!

Contains phosphoric acid.
CAUSES BURNS
HARMFUL IF SWALLOWED

This product can be corrosive to the eyes and may cause blindness. Product can cause severe skin damage. Inhalation of spray mists may cause respiratory tract inflammation or tissue destruction. DO NOT swallow this product. DO NOT breathe spray mists. DO NOT allow product to contact skin or clothing. Repeated exposure can have cumulative effects. Further information on the effects of overexposure is included on the Material Safety Data Sheet, which is available upon request.

ZEP MANUFACTURING COMPANY

Your One Source for Cleaning and Maintenance Products

1-877-I BUY ZEP

(1-877-428-9937)