

MATERIAL SAFETY DATA SHEET
M.S.D.S.

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I: PRODUCT IDENTIFICATION INFORMATION

TRADENAME (as labeled): ZIP FIX {CONCENTRATED} FIXER
Chemical Name:
Chemical Family:
Formula: Proprietary - Aqueous Solution
Synonyms:

EMERGENCY CONTACT:

CHEMTREC
1-800-424-9300

MANUFACTURER'S NAME: NACCO/ NATIONAL RESEARCH & CHEMICAL
 444 EAST GARDENA BLVD.
 GARDENA, CA. 90248
 PHONE: (310) 352-6999
 FAX: (310) 527-9963

Department of Transportation: (SHIPPING INFORMATION)

Date Prepared: January 2003
Hazardous Classification: None regulated
Shipping Name: Chemical N.O.S. **Dot Class:** 55
Packing Group: **UN/NA Number:**

II: PHYSICAL PROPERTIES

V.O.C.: N/A **Appearance:** Clear pale liquid
Vapor Density (air = 1): N/A **Vapor Pressure (at 20°C):** Negligible
Specific Gravity(H2O=1): 1.35 **Boiling Point/Range1F:** 213°F
Solubility in Water: Complete **Evaporation Rate:** >1
Odor: None **pH (of 1% solution):** N/A

III: COMPOSITION INFORMATION

<u>COMPONENTS</u>	<u>CAS#</u>
Ammonium Thiosulfate	7783-18-8
Sodium Sulfate	7757-83-7
Acetic Acid	64-17-7
Boric Acid	10043-35-3

Material Safety Data Sheet: Zip Fix {Concentrated} Fixer

IV: POTENTIAL HEALTH HAZARD DATA

EFFECTS OF ACUTE OVER- EXPOSURE:

Eye Contact: Can and will cause irritation.

Skin Absorption: May cause irritation. Avoid prolonged or repeated contact.

Inhalation: May cause irritation to the respiratory tract. Symptoms may include coughing or shortness of breath.

Skin Contact: May cause irritation. Avoid prolonged or repeated contact.

Swallowing: May cause nausea, dizziness and headache.

Other Health Hazards: None known

V: FIRST AID EMERGENCY PROCEDURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

Skin Contact: Flush with plenty of soap and water for at least 15 minutes. If irritation continues seek medical attention.

Inhalation: Immediately move to fresh air. Get medical attention.

Swallowed: Immediately contact physician. If conscious give large amounts of water.

Other: None known

VI: FIRE AND EXPLOSION HAZARD DATA

Flash Point: 104°F (C.C.)

Flammable Limits: N/A

Lower:

Upper:

Extinguishing Media: N/A

Water Spray:

Foam:

Carbon Dioxide:

Dry Chemical:

Special Fire Fighting Procedures: Use protective clothing and wear breathing equipment appropriate for the surrounding fire.

Unusual Fire/Explosion Hazard: Keep away from heat and flames.

Other: None known.

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VII: REACTIVITY DATA

Stability:

Stable:

X

Unstable:

Conditions to Avoid: Incompatibilities

Incompatibility: Strong alkali, sodium nitrate, halogens, and oxidizing agents. May react with acids to release sulfur dioxide.

Hazardous combustion's

or Decomposition Products: Oxides of sulfur and hydrogen sulfide.

Hazardous Polymerization:

May Occur:

Will Not Occur:

X

VIII: SPILL, LEAK AND DISPOSAL PROCEDURES

Steps to be taken: Contain spill by inorganic, non-combustible absorbent, such as, sand, pads or inert material.

Preparing waste for disposal: For disposal or discharge, contact Federal, State or Local Agencies.

NOTE: DISPOSE OF ALL WASTE ACCORDING WITH FEDERAL, STATE AND LOCAL REGULATIONS.

IX: SPECIAL HANDLING INFORMATION

Respiratory Protection: A local exhaust system should be considered. If necessary a NIOSH approved respirator to avoid mist and heavy vapors.

Ventilation: Use in well-ventilated area.

Protective Gloves: Rubber or plastic, impervious gloves.

Eye Protection: Safety goggles should be worn in chemical handling.

Other clothing and Equipment: Apron or lab coat. Also safety shower and eye bath.

Work practices, hygienic requirements: Avoid unnecessary personal contact. Wash hands thoroughly with soap and water after handling.

Other handling and storage requirements: Store above 48°F.

KEEP OUT OF REACH OF CHILDREN.

X: OTHER INFORMATION

HMIS RATINGS CHART:

HMIS:

Health:	2	Flammability:	0
Reactivity:	0	Personal Protection:	B

XI: REGULATORY INFORMATION

SARA TITLE III - SECTION 311/312:

N- Fire Hazard
N-Sudden release of pressure hazard
N-Reactivity hazard
N-Immediate health hazard (acute)
Y-Delayed health hazard (chronic)

SARA TITLE III - SECTION 302/304:

This product does not contain extremely hazardous substances at levels, which could require reporting.

SARA TITLE III = SECTION 313:

This product does not contain toxic chemicals at levels, which require reporting.

OZONE - DEPLETING CHEMICALS:

None

CERCLA REPORTABLE QUANTITY:

None

TSCA STATUS:

All components of these products are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

OSHA REGULATIONS:

Do not apply to this material or it's components. At levels which require reporting.

CALIFORNIA PROPOSITION 65:

This product does not contain chemicals known to the State of California to cause cancer.

CALIFORNIA SCAQMO RULE 443.1:

VOC - not applicable.