



**24 Hour Emergency Telephone
3E Company (800) 451-8346**

NOTE: 3E Company emergency number to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident. For routine questions or application information, please call Mid-West Solutions 219-661-8230

**MSDS Material Safety Data Sheet
B-442 Boiler Scale and Corrosion Inhibitor**

Revision Date: August 1, 2005

SECTION I - PRODUCT IDENTIFICATION

Product/Chemical Name: B-442, BOILER SCALE AND CORROSION INHIBITOR, NON-FDA APPLICATIONS
Proper Shipping Name: NOT REGULATED BY DOT
Hazard Class: NON-HAZARDOUS (DOT)
Hazard ID#: N/A
Completed by and Phone Number: Donald Carr (219) 661-8230

SECTION II - HAZARDOUS COMPONENTS

Hazardous Ingredient Name	CAS Number	% By Weight	OSHA PEL	ACGIH TLV
EXPOSURE LIMITS HAVE NOT BEEN ESTABLISHED FOR ANY OF THE COMPONENTS IN THIS PRODUCT. SEE SECTION V FOR HEALTH HAZARD INFORMATION				

SECTION III - PHYSICAL DATA

Boiling Point (Degrees F): 215°F
Evaporation Rate: AS WATER
Vapor Pressure (mm Hg): AS WATER
Vapor Density (Air= 1): AS WATER
Solubility In Water: COMPLETE
Appearance and Odor: WATER WHITE FLUID; NO ODOR

Specific Gravity: 1.125
Percent Volatile: N/D
pH Neat: 6.25
pH At 10%: 6.2

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A
HMIS and NFPA: HEALTH: 1 FIRE: 0 REACTIVITY: 0
Reactivity: 0
Extinguishing Media: PRODUCT CONTAINS WATER. IF WATER IS REMOVED, USE CARBON DIOXIDE, DRY CHEMICAL OR FOAM
Special Fire Fighting Instructions: WEAR PROTECTIVE GEAR DURING FIRE FIGHTING
Unusual Fire and Explosion Hazards: NON KNOWN

LEL: N/D
UEL: N/D

SECTION V - HEALTH HAZARD INFORMATION

Threshold Limit Value: EXPOSURE LIMITS HAVE NOT BEEN ESTABLISHED FOR ANY OF THE COMPONENTS IN THIS PRODUCT. SEE SECTION V FOR HEALTH HAZARD INFORMATION
Permissible Exposure Limit: EXPOSURE LIMITS HAVE NOT BEEN ESTABLISHED FOR ANY OF THE COMPONENTS IN THIS PRODUCT. SEE SECTION V FOR HEALTH HAZARD INFORMATION

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*** Acute Effects ***

Inhalation: INHALATION OF MISTS MAY CAUSE IRRITATION OF THE UPPER RESPIRATORY TRACT.

Skin: MAY CAUSE IRRITATION ON PROLONGED CONTACT.

Eye: MAY CAUSE IRRITATION.

Ingestion: MAY IRRITATE MOUTH, THROAT AND STOMACH.

*** First Aid ***

Inhalation: REMOVE TO A SOURCE OF FRESH AIR.

Skin: WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDRY BEFORE REUSING. CONSULT PHYSICIAN IF IRRITATION PERSISTS.

Eye: FLUSH WITH WATER FOR 15 MINUTES. CONSULT PHYSICIAN.

Ingestion: INDUCE VOMITING AND CONSULT PHYSICIAN.

*** Medical Conditions Generally Aggravated By Exposure ***

PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY EXPOSURE.

SECTION VI - REACTIVITY DATA

Stability: STABLE

Incompatibility (Materials to Avoid): STRONG OXIDIZERS

Hazardous Decomposition Products: THERMAL; OXIDES OF CARBON

Hazardous Polymerization: WILL NOT OCCUR

SECTION VII - SPILL OR LEAK PROCEDURES

Spill, Leak or Release: BLOCK ANY POTENTIAL ROUTES TO WATER SYSTEMS (E.G., SEWERS, STREAMS, LAKES, ETC.). RECOVER AS MUCH OF THE PURE PRODUCT AS POSSIBLE INTO POLY-DRUMS/CORROSION RESISTANT CONTAINERS. APPLY DRY ABSORBENT MATERIAL AND SWEEP UP THOROUGHLY TO ABSORB ANY MATERIAL THAT CAN NOT READILY BE RECOVERED AS PURE PRODUCT. LATER, DETERMINE IF THIS RECOVERED PRODUCT CAN BE USED FOR ITS INTENDED PURPOSE. ADDRESS CLEAN-UP OF CONTAMINATED ENVIRONMENTS.

Waste Disposal: FOLLOW PERTINENT REGULATION FOR DISPOSAL. IT IS THE RESPONSIBILITY OF THE PRODUCT USER TO DETERMINE, AT THE TIME OF DISPOSAL, WHETHER A MATERIAL CONTAINING THE PRODUCT OR DERIVED FROM THE PRODUCT SHOULD BE CLASSIFIED AS A HAZARDOUS WASTE. (40 CFR 261.20-24)

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection: REQUIRED IF THE EXPOSURE LIMITS IN SECTION II ARE EXCEEDED.

Ventilation: GENERAL MECHANICAL VENTILATION IS ADEQUATE. LOCAL EXHAUST PREFERRED IN MISTING CONDITIONS.

Protective Clothing/Equipment: RUBBER GLOVES. IMPERMEABLE APRON AND SHOES ARE RECOMMENDED.

Eye Protection: SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.

Other Protective Equipment: EYE-WASH AND SAFETY SHOWER RECOMMENDED.

Comments: NEVER EAT, DRINK, OR SMOKE IN WORK AREAS. PRACTICE GOOD PERSONAL HYGIENE AFTER USING THIS MATERIAL.



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SECTION IX - SPECIAL PRECAUTIONS

Storage and Handling Conditions: AVOID STORAGE NEAR STRONG OXIDIZERS. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. KEEP CONTAINERS CLOSED WHEN NOT IN USE.

SECTION X - STATE LISTS

Michigan Criticals Materials Register: WE HEREBY STATE THAT B-442F DOES NOT CONTAIN ANY OF THE COMPONENTS LISTED IN THE MICHIGAN CRITICALS MATERIALS REGISTER

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): THIS PRODUCT DOES NOT CONTAIN ANY COMPONENTS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR REPRODUCTIVE TOXICITY ABOVE NO SIGNIFICANT RISK LEVELS.

ADDITIONAL PRODUCT INFORMATION

*** Carcinogens as Defined By ***

NTP : NONE
IARC: NONE
OSHA: NONE

*** Environmental Information ***

SARA Title III(Superfund Amendments and Reauthorization Act)

THIS PRODUCT CONTAINS NO TOXIC CHEMICAL SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

NONE.

RCRA (Resource Conservation and Recovery Act) Listed Hazardous Waste

N/A

FDA (Food and Drug Administration)

THIS PRODUCT IS NOT APPROVED FOR FOOD CONTACT WITH STEAM APPLICATIONS.

TSCA (Toxic Substances Control Act) Applicability

ALL COMPONENTS IN THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)

THIS PRODUCT IS NOT A REGISTERED PESTICIDE.

Other Information

The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of our knowledge as of the date issued. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use are beyond our control, Mid-West solutions, Inc. makes no warranty, express or implied, regarding the accuracy of such data or its suitability for any purchaser's use or for any consequence of its use. The data in this MSDS relates only to the specific material designated here in and does not relate to use in combination with any other material or in any process. Safe handling and use remains the responsibility of the purchaser. Mid-West solutions, Inc. assumes no responsibility for injury to the recipient or to third persons or for any damage to any property and the recipient assumes all such risks.

- End of MSDS -