
MATERIAL SAFETY DATA SHEET

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Revised 2/02/04
Replaces 8/12/03
Printed 2/03/04

EMR-ZN**MSDS ID: 04497**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EMR-ZN
PRODUCT DESCRIPTOR: METAL FLOCCULANT
MANUFACTURER: JOHNSON DIVERSEY, INC.
3630 E. KEMPER ROAD
CINCINNATI, OH. 45241

EMERGENCY PHONE NUMBER: (800)851-7145

II. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME(CAS NUMBER)	%	EXPOSURE LIMITS	UNITS
SODIUM DIMETHYLDITHIOCARBAMATE (128-04-01)	<15	NOT ESTABLISHED	
CARBONOTRITHIOIC ACID, DISODIUM SALT (534-18-9)	<40	NOT ESTABLISHED	
CARBAMODITHIOIC ACID, DIETHYL SODIUM SALT (148-18-5)	<40	NOT ESTABLISHED	

III. HAZARDS IDENTIFICATION

ROUTES OF ENTRY: INHALATION: NO
SKIN: NO
INGESTION: YES

SIGNS AND SYMPTOMS OF EXPOSURE:
ACUTE: MAY CAUSE SEVERE IRRITATION TO EYES AND SKIN. MISTS AND
SPRAYS MAY IRRITATE LUNGS AND RESPIRATORY SYSTEM.
CHRONIC: SAME AS ACUTE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
SENSITIVE SKIN, RESPIRATORY CONDITIONS.

IV. FIRST AID MEASURES

EYES: FLUSH THOROUGHLY WITH FRESH WATER, FOR AT LEAST 15 MINUTES GET
MEDICAL ATTENTION.

SKIN: FLUSH WITH FRESH WATER, WASH WITH SOAP AND WATER. REMOVE
CONTAMINATED CLOTHES AND SHOES. GET MEDICAL ATTENTION IF
IRRITATION PERSISTS.

INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION, NEVER GIVE
ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

INHALATION: REMOVE TO FRESH AIR. GET MEDICAL ATTENTION IF IRRITATION
PERSISTS.

V. FIRE FIGHTING MEASURES

FLASH POINT: >200	DEG F	FLAME EXTENSION: N/A	IN.
FLAMMABLE LIMITS IN AIR BY VOLUME:		LEL: N/A	UEL: N/A
UNUSUAL FIRE OR EXPLOSION HAZARDS:		EXTREME HEAT OR STRONG ACIDS CREATE FLAMMABLE BY-PRODUCTS.	

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V. FIRE FIGHTING MEASURES (Cont.)

EXTINGUISHING MEDIA: WATER, FOAM, CARBON DIOXIDE, DRY CHEMICAL.
FIRE FIGHTING INSTRUCTIONS: WEAR PROTECTIVE GEAR TO AVOID SKIN
CONTACT. WEAR SELF-CONTAINED BREATHING
APPARATUS.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED: DO NOT FLUSH TO SEWER. DIKE SPILLS,
ABSORB ON INERT MATERIAL, SUCH AS CLAY OR SAND OR SPILL DRY.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: DO NOT PRESSURE CONTAINER TO EMPTY. KEEP
CONTAINER CLOSED.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: FACE SHIELD FOR MISTS AND SPRAYS
PROTECTIVE GLOVES: RUBBER GLOVES
RESPIRATORY PROTECTION: NONE
OTHER PROTECTIVE CLOTHING/EQUIPMENT: BOOTS, APRON FOR LARGE QUANTITIES OF
CONCENTRATE.
EXPOSURE GUIDELINES: SEE SECTION II FOR DETAILED INFORMATION.

IX. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (F): 212 SPECIFIC GRAVITY: 1.1000
VOLATILE BY VOLUME: NE SOLUBILITY IN WATER: 100
VAPOR PRESSURE (MMHG): 760 AT 20 C
APPEARANCE AND ODOR: RED LIQUID, SULFIDE ODOR.

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE
INCOMPATIBILITY WITH OTHER MATERIALS: STRONG ACIDS AND OXIDIZING AGENTS.
HAZARDOUS DECOMPOSITION PRODUCTS: STRONG ACIDS GIVE CS₂/EXTREME HEAT GIVES
H₂S.
HAZARDOUS POLYMERIZATION: NONE

XI. TOXICOLOGICAL INFORMATION

NO DATA AVAILABLE

XII. ECOLOGICAL INFORMATION

NO DATA AVAILABLE

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XIII. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: USE UNTIL LESS THAN ONE INCH REMAINS IN CONTAINER, EMPTY CONTAINER, TRIPLE RINSE CONTAINER WITH WATER ADD TO OPERATION. REMOVE OR DEFACE CONTAINER LABEL BEFORE SELLING OR DISPOSAL. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.

XIV. TRANSPORT INFORMATION

HAZARDOUS MATERIALS DESCRIPTION/PROPER SHIPPING NAME:

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

XV. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA/EPCRA:SECTION 313 TOXIC CHEMICALS:

LISTED CARCINOGEN: NONE

NTP: NO IARC: NO OSHA: NO

HMIS RATINGS: HEALTH: 3 FIRE: 0 REACTIVITY: 0

PERSONAL PROTECTIVE EQUIPMENT: C

STATE RIGHT-TO-KNOW INFORMATION:

WATER - CAS #7732-18-5

SODIUM DIMETHYLDITHIOCARBANATE (128-04-1)

CARBONOTRITHIOIC ACID, DISODIUM SALT (534-18-9)

CARBANODITHIOIC ACID, DIETHYL SODIUM SALT (148-18-5)

SODIUM DIMETHYLDITHIOCARBAMATE (128-04-1)

XVI. OTHER INFORMATION

THE INFORMATION IN THIS MSDS RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED OTHER THAN AS RECOMMENDED BY DIVERSEY LEVER OR IN COMBINATION WITH OTHER MATERIALS. IT IS THE USER'S RESPONSIBILITY TO EVALUATE THE APPLICABILITY OF THIS INFORMATION FOR HIS PARTICULAR CONDITIONS OF STORAGE, HANDLING AND USE.