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MSDS FOR KDF® 85 PROCESS MEDIUM

SECTION I - GENERAL INFORMATION

NAME:

BRASS POWDER

TRANSPORTATION EMERGENCY: CHEMTREC: 800-424-9300

MANUFACTURER: KDF FLUID TREATMENT, INC.

300 Frankfort Road

Monaca, PA 15061

412-774-1020

Fourth Street

Palmerton, PA 18071

610-826-8692

TRADE NAME AND SYNONYMS: None

CHEMICAL FAMILY: Metal Alloy Powder

CAS NO.: See Below

FORMULA:

Cu/Zn

DOT REGULATORY STATUS: Shipment by motor vehicle, rail cars or aircraft: Not regulated when transported in non-bulk packages.

Shipment by vessel: Marine Pollutant – use description: Environmentally hazardous substance, solid, N.O.S. (copper metal powder), class 9, UN3077, P.G. III, Marine Pollutant.

ISSUE DATE: 03/15/88

REVISION DATE: 11/16/98

<u>SECTION II - INGREDIENTS</u>

MATERIAL	<u>CAS NO</u> .	<u>%</u>	
COPPER	7440-50-8	55-99	
ZINC	7440-66-6	.5-45	

^{*}KDF product as delivered is not regulated.

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SECTION III - PHYSICAL DATA

BOILING POINT (760 MM HG): N/A MELTING POINT: 1710 - 1970° F

SPECIFIC GRAVITY: 8.5 - 8.9 EVAPORATION RATE (=1): N/A

VAPOR DENSITY (air = 1): N/A SOLUBILITY IN WATER: Insoluble

PERCENT VOLATILE BY VOLUME (%): N/A VAPOR PRESSURE 20° C: N/A

APPEARANCE AND ODOR: Brass-colored metallic particles with no odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A NFPA FIRE RATING

FLAMMABLE LIMITS: LEL: N/A HEALTH: 0

UEL: N/A FLAMMABILITY: 0
REACTIVITY: 0

EXTINGUISHING MEDIA: N/A

SPECIAL FIRE FIGHTING PROCEDURES: N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

SECTION V - HEALTH HAZARD DATA

MATERIAL	FORM	OSHA TWA mg/M3	- PEL STEL mg/M3	ACGIH TWA mg/M3	TLV STEL mg/M3
COPPER	Dust	1.0		1.0	
	Oxide Fume	0.1		0.2	
ZINC	Oxide Fume	5	10	5	10

ROUTS OF ENTRY

PRIMARY: Inhalation if the dust has become airborne.

SECONDARY: Ingestion

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EFFECTS OF SHORT TERM OVEREXPOSURE:

COPPER (FUME): Excessive inhalation of copper fumes can produce an acute reaction known as "metal fume fever. Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms), which come on a few hours after large exposures.

ZINC: Inhalation of high levels of zinc vapor (zinc oxide fumes) may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include; chills, fever, muscular pain, nausea and vomiting.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Inhalation of dust may be an irritant to pre-existing respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES: Symptoms resulting from inhalation overexposure usually disappear within 24 hours. Symptomatic treatment, such as bed rest and possibly aspirin is recommended to provide relief from fever and chills. Eye contact - flush areas with copious amounts of water. Skin contact - thoroughly wash affected areas with water. In all cases, consult physician for medical attention.

EFFECTS OF LONG TERM OVEREXPOSURE:

COPPER (FUME): Chronic exposure to copper may result in anemia, but chronic poisoning does not occur.

ZINC: Chronic exposure to zinc may cause respiratory tract irritation with nasopharyngitis and laryngitis.

CARCINOGENIC ASSESSMENT:

NTP? No

IARC MONOGRAPH? No.

OSHA? No

SECTION VI - REACTIVITY DATA

STABILITY: () Unstable

(X) Stable

CONDITIONS TO AVOID: N/A

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: () May occur

(X) Will not occur

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SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Avoid dusting; metal should be contained for recycling.

WASTE DISPOSAL METHOD: Contain in a dry, closed container. Material may be recycled or disposed of in accordance with Federal, State and Local Environmental Regulations. This material may be regulated under CERCLA, TSCA, SARA, and /or RCRA Regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): Use NIOSH/MSHA approved type respirator against dusting conditions.

VENTILATION: Local exhaust or other ventilation that will reduce dust concentrations to less than permissible exposure limits.

PROTECTIVE GLOVES: Recommended to prevent skin irritation.

EYE PROTECTION: Use safety eyewear for protection against airborne particulate matter.

OTHER PROTECTIVE EQUIPMENT: Barrier creams may help prevent skin irritation in hypersensitive individuals.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a cool, dry, well-ventilated space, separate from acids and alkalis.

OTHER PRECAUTIONS: Practice good personal hygiene when working in areas where this material is used.

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