

MISSOURI PETROLEUM  
BI-STATE EMULSIONS LLC PLANT  
3714 BIG BEND INDUSTRIAL COURT  
MAPLEWOOD, MO 63143

EMERGENCY 24-HOUR SPILL TELEPHONE NUMBER: 1-800-728-2482  
OTHER INFORMATION CALLS: BI-STATE EMULSIONS 1-800-645-1819

MATERIAL SAFETY DATA SHEET  
HFRS

QUICK IDENTIFIER: RAPID SETTING EMULSION

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SECTION 1-IDENTITY

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TRADE NAME & SYNONYMS: HFRS

C.A.S. NUMBER ASPHALT 60-70%, WATER 30-40%  
CATALYTIC CRACKED CLARIFIED OIL 0-20 %

CHEMICAL NAME: ASPHALT EMULSION

CHEMICAL FAMILY: PETROLUEM HYDROCARBON & WATER

FORMULA: VARIABLE MIXTURE

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SECTION 2-HAZARDOUS INGREDIENTS

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PRINCIPAL HAZARDOUS COMPONENTS % THRESHOLD LIMIT VALUE NOT ESTABLISHED

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SECTION 3-PHYSICAL & CHEMICAL CHARACTERISTICS

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BOILING POINT: 212 F SPECIFIC GRAVITY: (H2O=1) 1.001

VAPOR PRESSURE (MM HG): 23.7 VAPOR DENSITY (AIR @ 1):1

PERCENT VOLATILE BY VOLUME: 25-40 EVAPORATION RATE (WATER=1) 1

SOLUBILITY IN WATER: MISCIBLE REACTIVITY IN WATER: NONE

APPEARANCE AND ODOR: BROWN LIQUID AROMATIC ODOR

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#### SECTION 4-FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT (METHOD USED): FLAMMABLE OR EXPLOSIVE (DOES NOT APPLY TO EMULSION STATE).

AUTO IGNITION TEMPERATURE: N/A IN EMULSION STATE.

FLAMMABLE UNITS IN AIR % BY VOLUME: LOWER N/A UPPER N/A

EXTINGUISHER MEDIA: NON-FLAMMABLE IN EMULSION STATE

SPECIAL FIRE FIGHTING PROCEDURES: NONE

NOTE: IN ASPHALT STATE: SMALL FIRES USE DRY CHEMICAL CO<sub>2</sub>, WATER SPRAY OR REGULAR FOAM.

1. LARGE FIRES USE WATER SPRAY, FOG OR STANDARD FOAM.
2. DO NOT USE STRAIGHT STREAMS.
3. MOVE CONTAINERS FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK.

IN ASPHALT STATE PLEASE REVERT TO 2004 EMERGENCY RESPONSE GUIDEBOOK, D. O. T. GUIDE NUMBER 130 (FLAMMABLE LIQUIDS)

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#### SECTION 5-PHYSICAL HAZARDS

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MATERIAL IS: STABLE

CONDITIONS TO AVOID: NONE

INCOMPATIBILITY (MATERIALS TO AVOID): NONE

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

HAZARDOUS POLYMERIZATION WILL: NOT OCCUR

CONDITIONS TO AVOID: NONE

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#### SECTION 6-SPECIAL PROTECTION INFORMATION

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RESPIRATORY PROTECTION: (SPECIFY TYPE) NORMALLY NOT NEEDED.

VENTILATION:LOCAL EXHAUST

PROTECTIVE GLOVES: NORMALLY NOT NEEDED UNLESS PROLONGED CONTACT IS EXPECTED.

EYE: PROTECTION: GOGGLES OR FACE SHIELD WHEN EYE CONTACT MAY OCCUR.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: LONG SLEEVES AND LONG PANTS

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## SECTION 7-HEALTH HAZARDS

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THRESHOLD LIMIT VALUE: NOT ESTABLISHED

EFFECTS OF OVEREXPOSURE: PROLONGED OR REPEATED CONTACT AT WARM OR AMBIENT TEMPERATURE MAY CAUSE SKIN IRRITATION.

EMERGENCY AND FIRST AID PROCEDURES: INHALATION-IF OVER EXPOSURE OCCURS, REMOVE INDIVIDUAL TO FRESH AIR. IF DISCOMFORT CONTINUES, SEEK MEDICAL ATTENTION.

EYES: FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 20 MINUTES, OCASIONALLY LIFTING THE UPPER AND LOWER EYE LIDS. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN: HOT PRODUCT SHOULD BE COOLED WITH WATER. CLEAN SKIN WITH WATERLESS TYPE HAND CLEANER FOLLOWED BY SOAP AND WATER. IF IRRITATION OR BURN DEVELOPS, SEEK MEDICAL ATTENTION. COOL PRODUCT MAY BE CLEANED WITH WATERLESS TYPE HAND CLEANER.

INGESTION: IF MATERIAL IS SWALLOWED, DO NOT INDUCE VOMITTING. TREAT SYMPTOMATICALLY AND GET MEDICAL ATTENTION.

OSHA PERMISSIBLE EXPOSURE LIMIT: N/A FOR EMULSION(ASPHALT FUMES: 5MG/M3 MAX CEILING)

ACGIH THRESHOLD LIMIT VALUE: N/A FOR EMULSION. (ASPHALT FUMES:5MG/M3 TWA)

OTHER EXPOSURE LIMIT USES: NONE

ROUTES OF EXPOSURE: PRIMARY: SKIN CONTACT SECONDARY: EYE CONTACT.

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## SECTION 8-SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: AVOID SKIN CONTACT

OTHER PRECAUTIONS: LAUNDRY CONTAMINATED CLOTHING BEFORE RE-USE WASH SKIN THOROUGHLY WITH SOAP AFTER HANDLING.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: CREATE DIKES OR PONDS AS SOON AS POSSIBLE. USE EARTH, SAW DUST OR SAND TO MAKE DIKES OR TO USE AS ABSORBENT. UPON ABSORPTION, MATERIAL WILL REVERT TO ASPHALT STATE AND CAN BE REMOVED WITH ABSORPTION MATERIAL.

WASTE DISPOSAL METHOD: DISPOSE OF MATERIAL AT AN APPROVED WASTE DISPOSAL SITE OR FACILITY.