

Red Iron Oxide

MATERIAL SAFETY DATA SHEET

FERRIC OXIDE, POWDER
CAROLINA BIOLOGICAL

Revised: 09/05/00
Replaces: None
Printed: 04/08/06

PRODUCT IDENTIFICATION

PRODUCT NAME: FERRIC OXIDE
COMMON SYNONYMS: IRON (III) OXIDE; RED IRON OXIDE; C.I. 77491; IRON
SESQUIOXIDE
CHEMICAL FAMILY: IRON COMPOUNDS
FORMULA: Fe_2O_3
FORMULA WT.: 159.69
CAS NO.: 1309-37-1
NIOSH/RTECS NO.: NO7400000
PRODUCT USE: LABORATORY REAGENT
PRODUCT CODES: 2024
CHEMTREC # (800) 424-9300 NATIONAL RESPONSE CENTER # (800) 424-8802
J.T.BAKER INC. 222 RED SCHOOL LANE PHILLIPSBURG, NJ 08865 24-HOUR
EMERGENCY TELEPHONE -- (201) 859-2151
EFFECTIVE: 01/04/94 ISSUED: 04/08/95
REVISION #03

PRECAUTIONARY LABELING

BAKER SAF-T-DATA* SYSTEM

HEALTH	-	1	SLIGHT
FLAMMABILITY	-	0	NONE
REACTIVITY	-	1	SLIGHT
CONTACT	-	1	SLIGHT

LABORATORY PROTECTIVE EQUIPMENT
GOGGLES; LAB COAT

U.S. PRECAUTIONARY LABELING

CAUTION

MAY CAUSE IRRITATION. MAY BE HARMFUL IF INHALED.
DURING USE AVOID CONTACT WITH EYES, SKIN, CLOTHING. WASH THOROUGHLY
AFTER
HANDLING. WHEN NOT IN USE KEEP IN TIGHTLY CLOSED CONTAINER.

INTERNATIONAL LABELING

AVOID CONTACT WITH EYES. AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH
PLENTY OF WATER. KEEP CONTAINER TIGHTLY CLOSED.

SAF-T-DATA* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

COMPONENTS

COMPONENT	CAS NO.	WEIGHT %	OSHA/PEL
ACGIH/TLV			
FERRIC OXIDE	1309-37-1	98-100	10 MG/M 5
MG/M			

PHYSICAL DATA

BOILING POINT: N/A	VAPOR PRESSURE (MMHG): N/A
MELTING POINT: 1565 C (2849 F) (AT 760 MM HG)	VAPOR DENSITY (AIR=1): N/A
SPECIFIC GRAVITY: 5.24 (H ₂ O=1)	EVAPORATION RATE: N/A
SOLUBILITY (H ₂ O): NEGLIGIBLE (<0.1%)	% VOLATILES BY VOLUME: 0 (21 C)

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PH: N/A
ODOR THRESHOLD (P.P.M.): N/A PHYSICAL STATE: SOLID
COEFFICIENT WATER/OIL DISTRIBUTION: N/A
APPEARANCE & ODOR: RED TO BROWN POWDER. ODORLESS.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (CLOSED CUP): N/A
AUTOIGNITION TEMPERATURE: N/A
FLAMMABLE LIMITS: UPPER - N/A LOWER - N/A
FIRE EXTINGUISHING MEDIA
 USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.
SPECIAL FIRE-FIGHTING PROCEDURES
 FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-
CONTAINED
 BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE
PRESSURE
 MODE.
UNUSUAL FIRE & EXPLOSION HAZARDS
 NONE IDENTIFIED.
TOXIC GASES PRODUCED
 IRON FUMES
EXPLOSION DATA-SENSITIVITY TO MECHANICAL IMPACT
 NONE IDENTIFIED.
EXPLOSION DATA-SENSITIVITY TO STATIC DISCHARGE
 NONE IDENTIFIED.

HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV/TWA): 5 MG/M
SHORT-TERM EXPOSURE LIMIT (STEL): NOT ESTABLISHED
PERMISSIBLE EXPOSURE LIMIT (PEL): 10 MG/M

TOXICITY OF COMPONENTS
INTRAPERITONEAL RAT LD50 FOR FERRIC OXIDE 5500
MG/KG
INTRAPERITONEAL MOUSE LD50 FOR FERRIC OXIDE 5400
MG/KG

CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO
CARCINOGENICITY

 NONE IDENTIFIED.

REPRODUCTIVE EFFECTS

 NONE IDENTIFIED.

EFFECTS OF OVEREXPOSURE

 INHALATION: IRRITATION OF UPPER RESPIRATORY TRACT
 SKIN CONTACT: PROLONGED CONTACT MAY CAUSE IRRITATION
 EYE CONTACT: IRRITATION
 SKIN ABSORPTION: NONE IDENTIFIED
 INGESTION: NONE IDENTIFIED
 CHRONIC EFFECTS: LUNG DAMAGE

TARGET ORGANS

 RESPIRATORY SYSTEM, LUNGS

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

 NONE IDENTIFIED

PRIMARY ROUTES OF ENTRY

 INHALATION, SKIN CONTACT, EYE CONTACT

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EMERGENCY AND FIRST AID PROCEDURES

INGESTION: IF SWALLOWED AND THE PERSON IS CONSCIOUS, IMMEDIATELY GIVE

LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION.

INHALATION: IF A PERSON BREATHES IN LARGE AMOUNTS, MOVE THE EXPOSED

PERSON TO FRESH AIR.

SKIN CONTACT: IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH PLENTY OF

SOAP AND WATER FOR AT LEAST 15 MINUTES.

EYE CONTACT: IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH WITH PLENTY OF

WATER FOR AT LEAST 15 MINUTES.

SARA/TITLE III HAZARD CATEGORIES AND LISTS

ACUTE: YES CHRONIC: YES FLAMMABILITY: NO PRESSURE: NO REACTIVITY: NO

EXTREMELY HAZARDOUS SUBSTANCE: NO

CERCLA HAZARDOUS SUBSTANCE: NO

SARA 313 TOXIC CHEMICALS: NO

TSCA INVENTORY: YES

REACTIVITY DATA

STABILITY: STABLE
OCCUR

HAZARDOUS POLYMERIZATION: WILL NOT

CONDITIONS TO AVOID: NONE DOCUMENTED

INCOMPATIBLES: HYDRAZINE, CALCIUM HYPOCHLORITE, PERFORMIC ACID

DECOMPOSITION PRODUCTS: NONE IDENTIFIED

SPILL & DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE

WEAR SUITABLE PROTECTIVE CLOTHING. CAREFULLY SWEEP UP AND REMOVE.

DISPOSAL PROCEDURE

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

INDUSTRIAL PROTECTIVE EQUIPMENT

VENTILATION: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV

REQUIREMENTS.

RESPIRATORY PROTECTION: NONE REQUIRED WHERE ADEQUATE VENTILATION CONDITIONS

EXIST. IF AIRBORNE CONCENTRATION EXCEEDS TLV, A SELF-CONTAINED BREATHING APPARATUS IS ADVISED.

EYE/SKIN PROTECTION: SAFETY GOGGLES, RUBBER GLOVES ARE RECOMMENDED.

STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

STORAGE REQUIREMENTS

KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STORAGE

AREA.

TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

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INTERNATIONAL (I.M.O.)
PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)
MARINE POLLUTANTS: NO

AIR (I.C.A.O.)
PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

U.S. CUSTOMS HARMONIZATION NUMBER: 28211000500

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