



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.80

Section 1 - Product and Company Information

Product Name Iron-Dextran
Product Number D8517
Brand Sigma Chemical

Company Sigma-Aldrich
Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5832
Fax: 800-325-5052

Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
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IRON DEXTRAN	9004-66-4	No		
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<u>Ingredient Name</u>	<u>CAS #</u>	<u>Percent</u>	<u>SARA 313</u>
PHENOL STAB.	108-95-2	<= 0.500 %	Yes

Formula
Synonyms A 100, A 100 (Pharmaceutical), B 75, Chinofer, Dextran iron complex, Dextrofer 75, Eisendextran (German), Fe-Dextran, Fenate, Ferdex 100, Ferric dextran, Ferridextran, Ferrodextran, Ferroglicin, Ferroglicin 75, Imposil, Iro-Jex, Iron dextran, Iron-dextran complex, Iron dextran injection, Iron hydrogenated dextran, Ironorm injection, Myofer 100, Polyfer, Prolongal, RCRA waste number U139, Ursoferan

Section 3 - Hazards Identification

Emergency Overview

Harmful.
Limited evidence of a carcinogenic effect. May cause sensitization by inhalation and skin contact.
Calif. Prop. 65 carcinogen. Target organ(s): Central nervous system. Kidneys.

HMIS Rating
Health: 3* Flammability: 0 Reactivity: 0

NFPA Rating
Health: 3 Flammability: 0 Reactivity: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media

Suitable
Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure

Avoid contact with eyes, skin, and clothing. Do not breathe vapor.

Storage

Suitable

Keep tightly closed.

Section 8 - Exposure Controls / PPE

Engineering Controls

Mechanical exhaust required.

Personal Protective Equipment

Respiratory

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Other

Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

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Sigma-Aldrich Corporation
www.sigma-aldrich.com

General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance		Form
Physical State		Turbid
Liquid		
pH	4.0 - 6.5	
BP/BP Range	N/A	
MP/MP Range	N/A	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density		
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point °F	N/A	
Flash Point °C	N/A	
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Solubility	N/A	

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable
Stable.
Materials to Avoid
Oxidizing agents.

Hazardous Decomposition Products

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide, Iron oxides

Hazardous Polymerization

Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

Sensitization

Respiratory

May cause allergic respiratory reaction.

Skin

May cause allergic skin reaction.

Target Organ(s) or System(s)

Kidneys. Central nervous system.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: NI2200000

Toxicity Data

Intraperitoneal - Rat: 3 GM(FE)/KG (LD50)

Intraperitoneal - Rat: 3 GM(FE)/KG (LD50)

Oral - Mouse: 1 GM(FE)/KG (LD50)

Oral - Mouse: 1 GM(FE)/KG (LD50)

Intravenous - Mouse: 460 MG(FE)/KG (LD50)

Intravenous - Mouse: 460 MG(FE)/KG (LD50)

Chronic Exposure- Carcinogen

Result: This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Woman - Intramuscular: 20 MG/KG 3Y I

Result: Tumorigenic: Neoplastic by RTECS criteria. Tumorigenic: Tumors at site or application.

Woman - Intramuscular: 20 MG/KG 3Y I

Result: Tumorigenic: Neoplastic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Subcutaneous: 750 MG(FE)/KG 4W I

Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Subcutaneous: 750 MG(FE)/KG 4W I

Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Intramuscular: 1150 MG/KG 17W I

Result: Tumorigenic: Neoplastic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Intramuscular: 1150 MG/KG 17W I

Result: Tumorigenic: Neoplastic by RTECS criteria. Tumorigenic: Tumors at site or application.

Mouse - Subcutaneous: 2300 MG/KG I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Blood: Lymphomas including Hodgkin's disease.
Tumorigenic: Tumors at site or application.

Mouse - Subcutaneous: 2300 MG/KG I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Blood: Lymphomas including Hodgkin's disease.
Tumorigenic: Tumors at site or application.

Mouse - Intramuscular: 2 GM(FE)/KG 9W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Mouse - Intramuscular: 2 GM(FE)/KG 9W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Rabbit - Intramuscular: 28 GM/KG 27W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Rabbit - Intramuscular: 28 GM/KG 27W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Hamster - Subcutaneous: 40 GM/KG 10W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors.

Hamster - Subcutaneous: 40 GM/KG 10W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors.

Mouse - Subcutaneous: 1120 MG(FE)/KG 28W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Mouse - Subcutaneous: 1120 MG(FE)/KG 28W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Intramuscular: 3760 MG(FE)/KG 47W I
Result: Tumorigenic: Neoplastic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Intramuscular: 3760 MG(FE)/KG 47W I
Result: Tumorigenic: Neoplastic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Subcutaneous: 104 GM/KG 26W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Subcutaneous: 104 GM/KG 26W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Subcutaneous: 1500 MG(FE)/KG 8W I
Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Subcutaneous: 1500 MG(FE)/KG 8W I
Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic: Tumors at site or application.

Woman - Intramuscular: 52 MG(FE)/KG 6W I
Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic: Tumors at site or application.

Woman - Intramuscular: 52 MG(FE)/KG 6W I
Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Subcutaneous: 2400 MG(FE)/KG 24W I
Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic: Tumors at site or application.

Rat - Subcutaneous: 2400 MG(FE)/KG 24W I
Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic: Tumors at site or application.

Mouse - Subcutaneous: 104 GM/KG 13W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Bronchiogenic carcinoma.
Tumorigenic: Tumors at site or application.

Mouse - Subcutaneous: 104 GM/KG 13W I
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Bronchiogenic carcinoma.
Tumorigenic: Tumors at site or application.

IARC Carcinogen List

Rating
Group 2B

NTP Carcinogen List

Rating
Anticipated to be a carcinogen.
Anticipated to be a carcinogen.

Chronic Exposure- Teratogen

<u>Species</u>	<u>Dose</u>	<u>Route of Application</u>	<u>Exposure Time</u>
Rabbit	650 MG	Intramuscular	(FE)/KG (6-18D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).			
Rabbit	650 MG	Intramuscular	(FE)/KG (6-18D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).			

Chronic Exposure- Reproductive Hazard

<u>Species</u>	<u>Dose</u>	<u>Route of Application</u>	<u>Exposure Time</u>
Rat	2580 GM/KG	Intravenous	(17-20D PREG)
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain).			
Rat	2580 GM/KG	Intravenous	(17-20D PREG)
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain).			
Rat	240 MG/KG	Intramuscular	(6W PRE)
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain) Effects on Newborn: Behavioral.			
Rat	240 MG/KG	Intramuscular	(6W PRE)
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain) Effects on Newborn: Behavioral.			
Rat	52500 UG/KG	Intrauterine	(1D PRE)
Result: Maternal Effects: Uterus, cervix, vagina.			
Rat	52500 UG/KG	Intrauterine	(1D PRE)
Result: Maternal Effects: Uterus, cervix, vagina.			
Rat	5250 UG/KG	Intrauterine	(1D PRE)
Result: Maternal Effects: Uterus, cervix, vagina. Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated).			
Rat	5250 UG/KG	Intrauterine	(1D PRE)
Result: Maternal Effects: Uterus, cervix, vagina. Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated).			

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None
Non-Hazardous for Transport This substance is considered to be nonhazardous for transport.

IATA

Non-Hazardous for Air Transport Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: Xn

Indication of Danger

Harmful.

Risk Statements R: 40 42/43

Limited evidence of a carcinogenic effect. May cause sensitization by inhalation and skin contact.

Safety Statements S: 23 26 36/37/39 45

Do not breathe vapor. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Classification and Label Text

Indication of Danger

Harmful.

Risk Statements

Limited evidence of a carcinogenic effect. May cause sensitization by inhalation and skin contact.

Safety Statements

Do not breathe spray. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Statements

Calif. Prop. 65 carcinogen. Target organ(s): Central nervous system. Kidneys.

United States Regulatory Information

SARA Listed: No

United States - State Regulatory Information

California Prop - 65

This product is or contains chemical(s) known to the state of California to cause cancer. California Proposition 65: This product is or contains chemical(s) known to the state of California to cause cancer. California Proposition 65: This product is or contains chemical(s) known to the state of California to cause cancer.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. SigmaAldrich Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice packing slip for additional terms and conditions of sale. Copyright 2013 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.