



SAFETY DATA SHEET

Issue Date 24-May-2021

Revision Date
09-May-2025

Version 3.7

Page 1 / 18

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Code(s) 92746
Product Name FerroVer® Iron Reagent Powder Pillows

Other means of identification

Safety data sheet number M00020

Recommended use of the chemical and restrictions on use

Recommended Use Water Analysis. Iron determination.
Restrictions on use None.
Uses advised against None

Details of the supplier of the safety data sheet

Supplier Address

Hexis Cientifica Ltda CNPJ: 53.276.010 / 00001-10 Av. Antonieta Piva Barranqueiros, 385 - Industrial District - Jundiai - SP -
Phone: 11 4589-2672

Manufacturer Address

Hach Company, P.O. Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

0800 892 0479

Argentina

Argentina: +(54)-1159839431

Ecuador

Ecuador: +593-01 800 000 906 (Access Code: 334846)

Costa Rica

Costa Rica - National Poison Center: +506-2223-1028

Colombia

Colombia: +57 601 7942539 / 01-800-7102151

United States of America

+1(303) 623-5716 - 24 Hour Service

Section 2: HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 5
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Aquatic Acute Toxicity	Category 3
Chronic aquatic toxicity	Category 3

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 2 / 18

Label elements



Signal word - Danger

Hazard statements

H302 - Harmful if swallowed
H313 - May be harmful in contact with skin
H315 - Causes skin irritation
H318 - Causes serious eye damage
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements

P280 - Wear protective gloves, protective clothing, eye protection, and face protection
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P332 + P313 - If skin irritation occurs: Get medical attention
P362 + P364 - Take off all contaminated clothing and wash it before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P284 - In case of inadequate ventilation wear respiratory protection
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor
P501 - Dispose of contents/ container to an approved waste disposal plant
P271 - Use only outdoors or in a well-ventilated area
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P273 - Avoid release to the environment
P270 - Do not eat, drink or smoke when using this product
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth

Other Hazards Known

Other hazards which do not result in classification

No information available

- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Pure substance/mixture

Mixture

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 3 / 18

Chemical Name Not applicable
Chemical Family Mixture

CAS No Not applicable

Chemical name	CAS No.	Percent Range
Sodium metabisulfite	7681-57-4	40 - 50%
Sodium dithionite	7775-14-6	20 - 30%
1,10-Phenanthroline, mono(4-methylbenzenesulfonate)	92798-16-8	1 - 5%

Section 4: FIRST AID MEASURES

Description of necessary first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation Remove to fresh air. May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get immediate medical advice/attention.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Eye contact Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. May produce an allergic reaction. Get immediate medical advice/attention.

For emergency responders

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms/effects, acute and delayed

Symptoms Burning sensation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives.

Indication of immediate medical attention and special treatment needed, if necessary

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available

Specific hazards arising from the chemical

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by inhalation and skin contact.

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 4 / 18

Flammable properties

Can burn in fire, releasing toxic vapors. Not classified as flammable according to GHS criteria

Explosive properties

Not classified according to GHS criteria.

Hazardous combustion products Sulfur oxides. Sodium oxides. Carbon monoxide, Carbon dioxide.

Specific/special fire-fighting measures

Specific/special fire-fighting measures No information available.

Special protective equipment and precautions for fire-fighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.
Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

For emergency responders Use personal protective equipment as required.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Other Information Refer to protective measures listed in Sections 7 and 8.

Reference to other sections See section 8 for more information.
See section 13 for more information.

Section 7: HANDLING AND STORAGE

Preventive measures for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. Avoid breathing vapors or mists.

Precautions for safe handling

General Hygiene Considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	Brazil	Chile	Argentina	Venezuela
Sodium metabisulfite 'CAS #:' 7681-57-4	TWA: 5 mg/m ³	TWA: 4.4 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³

Chemical name	Mexico	Colombia	Uruguay	Peru
Sodium metabisulfite 'CAS #:' 7681-57-4	5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Sodium metabisulfite 40 - 50%	TWA: 5 mg/m ³	(vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³

Legend

See section 16 for terms and abbreviations

Appropriate engineering controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Ensure adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Wear breathing apparatus if exposed to vapors/dusts/aerosols.

Hand Protection

Wear suitable gloves. Impervious gloves. Barrier creams may help to protect the exposed areas of skin. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1:2016.

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing.

General Hygiene Considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Environmental exposure controls

Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

Thermal hazards

None under normal processing.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Solid

Appearance

crystalline

Color

White to yellow

Odor

Sulfur-like

Odor threshold

No data available

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 6 / 18

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	No data available	
pH	5.3	5% Solution
Melting point / freezing point	> 400 °C / 752 °F	
Initial boiling point and boiling range	No data available	
Evaporation rate	Not applicable	
Vapor pressure	Not applicable	
Relative vapor density	No data available	
Specific gravity - VALUE 1	2.21	
Partition coefficient	log K _{ow} ~ -2.31	
Soil Organic Carbon-Water Partition Coefficient	log K _{oc} ~ -0.09	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	Not applicable	
Kinematic viscosity	Not applicable	
<u>Solubility(ies)</u>		

Water solubility

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

Other information

Corrosive to metals

Steel Corrosion Rate 2.06 mm/yr / 0.08 in/yr
Aluminum Corrosion Rate 0.25 mm/yr / 0.01 in/yr

Volatile Organic Compounds (VOC) Content

Not applicable

<u>Chemical name</u>	<u>CAS No.</u>	<u>Volatile organic compounds (VOC) content</u>	<u>CAA (Clean Air Act)</u>
Sodium metabisulfite	7681-57-4	Not applicable	-
Sodium dithionite	7775-14-6	Not applicable	-
1,10-Phenanthroline, mono(4-methylbenzenesulfonate)	92798-16-8	No data available	-

Explosive properties

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 7 / 18

Upper explosion limit
Lower explosion limit

No data available
No data available

Flammable properties

Flash point

Not applicable

Flammability Limit in Air
Upper flammability limit:
Lower flammability limit:

No data available
No data available

Oxidizing properties

No data available.

Bulk density

No data available

Section 10: STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None
Sensitivity to Static Discharge None.

Possibility of hazardous reactions

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

Sodium oxides. Sulfur oxides. Carbon dioxide. Carbon monoxide.

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	May cause sensitization in susceptible persons. May cause irritation of respiratory tract.
Eye contact	Severely irritating to eyes. Causes serious eye damage. May cause burns. May cause irreversible damage to eyes.
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Causes skin irritation.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 8 / 18

additional effects as listed under "Inhalation". Harmful if swallowed.

Symptoms

Redness. Burning. May cause blindness. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. May cause redness and tearing of the eyes.

Acute toxicity

Harmful if swallowed

May be harmful in contact with skin

Mixture

Test data reported below.

Oral Exposure Route

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 9 / 18

<u>Endpoint type</u>	<u>Toxicological effects</u>	<u>Key literature references and sources for data</u>
Rat LD ₅₀	Behavioral Chewing motion Coma Flaccid muscle tone Lethargy Prostration Sedation Tonic convulsions Tremor Twitching Chronic Death Eye Ptosis Gastrointestinal Diarrhea Enteritis of the intestines Gas Inflammation of the small and large intestine Inflammation of the stomach Kidney, Ureter, or Bladder Abnormalities of the kidneys Lungs, Thorax, or Respiration Congestion of the lungs Respiratory depression Hemorrhagic lungs Nutritional and Gross Metabolic Wetness of the anogenital area Reproductive Skin and Appendages Piloerection	Outside testing

Ingredient Acute Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	Rat LD ₅₀	500 mg/kg	None reported	None reported	No information available
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	Mouse LD ₅₀	1500 mg/kg	None reported	None reported	ERMA
1,10-Phenanthroline,	Rat	245.6 mg/kg	None reported	None reported	Internal Data

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 10 / 18

mono(4-methylbenzene sulfonate) (1 - 5%) CAS#: 92798-16-8	LD ₅₀				
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Dermal Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	Rat LD ₅₀	> 2000 mg/kg	None reported	None reported	LOLI

Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	Rat LC ₅₀	> 5.5 mg/L	4 hours	None reported	RTECS

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD ₅₀	No information available
Dermal LD ₅₀	4,626.40 mg/kg
Mist	No information available
Vapor	No information available
Gas	No information available

Skin corrosion/irritation

Classification based on data available for ingredients. Irritating to skin.

Mixture

No data available.

Ingredient Skin Corrosion/Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	Standard Draize Test	Rabbit	800 mg	None reported	Mild skin irritant	IUCLID

Serious eye damage/irritation

Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 11 / 18

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	Standard Draize Test	Rabbit	107 mg	None reported	Corrosive to eyes	RTECS
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	Standard Draize Test	Rabbit	100 mg	None reported	Eye irritant	IUCLID

Respiratory or skin sensitization

May cause sensitization by inhalation.

Mixture

No data available.

Ingredient Sensitization Data

Test data reported below.

Skin Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	Based on human experience	Human	Not confirmed to be a skin sensitizer	OECD 429: Skin Sensitization: Local Lymph Node Assay

Respiratory Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	Based on human experience	Human	Confirmed to be a respiratory sensitizer	GESTIS

STOT - single exposure

May cause respiratory irritation.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	Rat TD _{Lo}	75 mg/kg	15 days	Biochemical Enzyme inhibition, induction, or change in blood or tissue levels	RTECS

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 12 / 18

				(phosphatases and dehydrogenases) Kidney, Ureter, or Bladder Other changes in urine composition	
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	Rat NOAEL	217 mg/kg	None reported	None reported	OECD 429: Skin Sensitization: Local Lymph Node Assay

Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Carcinogenicity Data

Test data reported below.

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sodium metabisulfite	7681-57-4	-	Group 3	-	-
Sodium dithionite	7775-14-6	-	-	-	-
1,10-Phenanthroline, mono(4-methylbenzenesul fonate)	92798-16-8	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 3 - Not Classifiable as to Carcinogenicity in Humans
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	None reported	942 mg/kg	2 years	Negative results for carcinogenicity	No information available

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture *invitro* Data

No data available.

Substance *invitro* Data

Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	Cytogenetic analysis	Hamster ovary	0.18 mg/L	None reported	Positive test result for mutagenicity	RTECS
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	Mutation in microorganisms	<i>Salmonella typhimurium</i>	None reported	None reported	Negative	IUCLID

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 13 / 18

Mixture *in vivo* Data

No data available.

Substance *in vivo* Data

Test data reported below.

Oral Exposure Route

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	Cytogenetic analysis	Rat	1200 mg/kg	None reported	Negative test result for mutagenicity	IUCLID

Reproductive toxicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Reproductive Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	Rat TD _{Lo}	20000 mg/kg	None reported	Effects on Newborn Stillbirth	RTECS

Aspiration hazard

Based on available data, the classification criteria are not met.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Unknown Aquatic Toxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Mixture

Aquatic Acute Toxicity

No data available.

Aquatic Chronic Toxicity

No data available.

Substance

Aquatic Acute Toxicity

Test data reported below.

Fish

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium metabisulfite	96 hours	<i>Salmo gairdneri</i>	LC ₅₀	15 mg/L	IUCLID

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 14 / 18

(40 - 50%) CAS#: 7681-57-4					
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	96 hours	<i>Leuciscus idus</i>	LC ₅₀	>= 46 mg/L	IUCLID
1,10-Phenanthroline, mono(4-methylbenze nesulfonate) (1 - 5%) CAS#: 92798-16-8	96 hours	None reported	LC ₅₀	1353 mg/L	ECOSARS

Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium dithionite (20 - 30%) CAS#: 7775-14-6	48 Hours	<i>Daphnia magna</i>	EC ₅₀	98 mg/L	IUCLID
1,10-Phenanthroline, mono(4-methylbenze nesulfonate) (1 - 5%) CAS#: 92798-16-8	48 Hours	None reported	LC ₅₀	717 mg/L	ECOSARS

Algae

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium metabisulfite (40 - 50%) CAS#: 7681-57-4	96 hours	<i>Scenedesmus subspicatus</i>	EC ₅₀	40 mg/L	IUCLID
1,10-Phenanthroline, mono(4-methylbenze nesulfonate) (1 - 5%) CAS#: 92798-16-8	96 hours	None reported	EC ₅₀	402 mg/L	ECOSARS

Aquatic Chronic Toxicity

No data available.

Persistence and degradability

Mixture

No data available.

Bioaccumulation

Material does not bioaccumulate.

Mixture

No data available.

Partition coefficient

log K_{ow} ~ -2.31

Mobility

Soil Organic Carbon-Water Partition Coefficient

log K_{oc} ~ -0.09

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>IATA</u>	Not regulated
<u>ADR</u>	Not regulated

Additional information

Section 15: REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECI	Complies
PICCS	Does not comply
TCSI	Complies
AICS	Complies
NZIoC	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

Country Regulations

Brazil

Federal Decree 10.088 / 2019

Standard ABNT NBR 14725

Ordinance no. 2.770 / 2022

Resolution no. 5.998 / 2022 - ANTT

Ordinance no. 426 / 2021

Ordinance no. 256 / 2018

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 16 / 18

Federal Decree 10.030 / 2019
Ordinance no. 118 / 2019
Law no. 12.305 / 10
Law no. 10.357 / 2001
Ordinance no. 204 / 2022
Ordinance no. 577 / 2021

Brazil - Chemicals Subject to Control and Inspection

Exempted from Ordinance No 204/2022

Chemical name	List I	List II	List III	List IV	List V	List VI	List VII
Sodium metabisulfite							X

Argentina

SRT 3359/2015
Resolution 801/2015
Law of Health and Safety and Work (Law 19,587)
Decree 351/79
Regulatory Law 19587

Columbia

Law 253, 1996: Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.
Resolution 2400/1979: Ministry of Labour and Social Security, ACGIH Exposure Limits.
Decision 602, Andean Regulation for the Control of chemical substances used in the illegal manufacture of narcotic drugs and psychotropic substances.
Law 29/1992: Montreal Protocol on Substances that Deplete the Ozone Layer and its Amendments.
Law 55/1993: Recommendation No. 177 on the International Work Conference on Safety in the Use of Chemical Products at Work.
Law 30/1990: Vienna Convention for the Protection of the Ozone Layer.
Law 55/1993: Convention No. 170 on the General Conference of the ILO.

Uruguay

Law 16.157: Approval of the Montreal Protocol on Substances that Deplete the Ozone Layer.
Law 17.283: Regarding environmental protection and management of hazardous wastes.
Presidential Decree 346/11: Implementation of GHS for all manufactured or distributed products.
Presidential Decree 519/984: Regulates the activities relating to the use of radioactive materials and ionizing radiation throughout the country.

Ecuador

Law No. 37 - Environmental Management Act
NTE INEN 2266:2013 - Requirements for Transport, Storage and Handling of Hazardous Materials
Unified Text of Secondary Legislation of the Environment Ministry: Book VI

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR	ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS	CCRIS (Chemical Carcinogenesis Research Information System)
CDC	CDC (Center for Disease Control)
CEPA	CEPA (Canadian Environmental Protection Agency)
CICAD	CICAD (Concise International Chemical Assessment Documents)
ECHA	ECHA (The European Chemicals Agency)
EEA	EEA (European Environment Agency)
EPA	Environmental Protection Agency
ERMA	ERMA (New Zealand's Environmental Risk Management Authority)

Product Code(s) 92746
Issue Date 24-May-2021
Version 3.7

Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 17 / 18

ECOSARS	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™
FDA	FDA (Food & Drug Administration)
GESTIS	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
HSDB	HSDB (Hazardous Substances Data Bank)
INERIS	INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM	IPCS INCHEM (International Programme on Chemical Safety)
IUCLID	IUCLID (The International Uniform Chemical Information Database)
NITE	Japan National Institute of Technology and Evaluation (NITE)
NIH	NIH (National Institutes of Health)
NIOSH	NIOSH (National Institute for Occupational Safety and Health)
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)
NDF	no data
NICNAS	Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH IDLH	Immediately Dangerous to Life or Health
OSHA	Occupational Safety and Health Administration of the US Department of Labor
PEEN	PEEN (Pan European Ecological Network)
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS	SIDS (Screening Information Dataset) for High Volume Chemicals
SYKE	The Finnish Environment Institute (SYKE)
USDA	USDA (United States Department of Agriculture)
USDC	USDC (United States Department of Commerce)
WHO	WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value	MAC	Maximum Allowable Concentration
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

NIOSH (RTECS) Number None reported

Key literature references and sources for data

See Section 11: TOXICOLOGICAL INFORMATION

See Section 12: ECOLOGICAL INFORMATION

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Restrictions on use None

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Product Name FerroVer® Iron Reagent Powder Pillows
Revision Date 09-May-2025
Page 18 / 18

This material safety data sheet has been prepared according to Brazilian legislation and ABNT NBR 14725:2009

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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End of Safety Data Sheet