

# **SAFETY DATA SHEET**

Be Right<sup>™</sup>

Issue Date 06-Aug-2020	Revision Date 05-Apr-2023	Version 6.6	Page	1 / 16
	1. IDENTIFICAT	ION		
<u>Product identifier</u> Product Name	FerroVer <sup>®</sup> Iron Reagent			
Other means of identification Product Code(s)	2105769			
Safety data sheet number	M00135			
<u>Recommended use of the che</u> Recommended Use Uses advised against Restrictions on use	mical and restrictions on use Laboratory reagent. Iron determin Consumer use. For Laboratory Use Only.	ation.		
Details of the supplier of the safety data sheet				
Manufacturer Address				

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

#### Emergency telephone number

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

# 2. HAZARDS IDENTIFICATION

#### Classification

#### **Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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

#### Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

# Signal word

Danger

Product Name FerroVer® Iron Reagent Revision Date 05-Apr-2023 Page 2 / 16



#### Hazard statements

- H302 Harmful if swallowed
- 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 soap and water
- P332 + P313 If skin irritation occurs: Get medical attention
- P362 Take off contaminated clothing and wash 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/physician

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P285 In case of inadequate ventilation wear respiratory protection

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

- P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
- P501 Dispose of contents/ container to an approved waste disposal plant
- P271 Use only outdoors or in a well-ventilated area
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
- 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/physician if you feel unwell
- P330 Rinse mouth

#### Other Hazards Known

Harmful to aquatic life

#### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Substance

Not applicable

**Mixture** 

Chemical Family Chemical nature Mixture. Mixture of organic compounds.

#### Percent ranges are used where confidential product information is applicable.

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

# 4. FIRST AID MEASURES

#### **Description of 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.
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.
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.
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.
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 and effe	cts, both 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 any immediate medica	al attention and special treatment needed
Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.
	5. FIRE-FIGHTING MEASURES
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	Caution: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by inhalation and skin contact.
Hazardous combustion products	Thermal decomposition can lead to release of irritating and toxic gases and vapors. Sulfur oxides. Sodium monoxide. Carbon monoxide, Carbon dioxide.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
	6. ACCIDENTAL RELEASE MEASURES
U.S. Notice	Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside

of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

#### 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.		
Other Information	Refer to protective measures listed in Sections 7 and 8.		
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.		
Reference to other sections	See section 8 for more information. See section 13 for more information.		

# 7. HANDLING AND STORAGE

#### Precautions 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.

#### Conditions for safe storage, including any incompatibilities

- Storage ConditionsKeep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach<br/>of children. Store locked up.
- Flammability class Not applicable

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Sodium metabisulfite	TWA: 5 mg/m <sup>3</sup>	(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
CAS#: 7681-57-4			

#### Appropriate engineering controls

Engineering Controls

#### Showers

Eyewash stations Ventilation systems. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous

substance at the specific workplace.

Individual protection measures, such	ch 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. Wear breathing apparatus if exposed to vapors/dusts/aerosols.
Hand Protection	Wear suitable gloves. Impervious gloves. 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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical state Appearance Odor	crystalline Sulfur-like	Solid		Color Odor threshold	White to yellow No data available
Property_			Values		Remarks • Method
Molecular weigh	t		Not applicable		
рН			5.29		5% @ 20°C
Melting point/fre	ezing point		192 °C / 37	7.6 °F	
Initial boiling poi	int and boiling rang	je	No data availat	ble	
Evaporation rate			Not applicable		
Vapor pressure			Not applicable		
Relative vapor de	ensity		No data availa	ble	
Specific gravity -	VALUE 1		2.27		
Partition coeffici	ent		log Kow ~ -1.33		
Soil Organic Car Coefficient	bon-Water Partition	า	log K <sub>oc</sub> ~ -0.03		
Autoignition tem	perature		No data availat	ble	
Decomposition t	emperature		192.22 °C / 3	378 °F	
Dynamic viscosi	ty		Not applicable		
Kinematic viscos	sity		Not applicable		

#### Solubility(ies)

#### Water solubility

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

#### Solubility in other solvents

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

#### **Other information**

#### **Metal Corrosivity**

#### Steel Corrosion Rate Aluminum Corrosion Rate

2.69 mm/yr / 0.11 in/yr 0.08 mm/yr / 0 in/yr

#### Volatile Organic Compounds (VOC) Content Not applicable

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

#### **Explosive properties**

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

# **10. STABILITY AND REACTIVITY**

Reactivity Not applicable.

<u>Chemical stability</u> Stable under normal conditions.

**Explosion data** 

#### Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

#### Possibility of hazardous reactions

None under normal processing.

#### **Hazardous polymerization**

Hazardous polymerization does not occur.

#### Conditions to avoid

None known based on information supplied.

#### Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

#### Hazardous decomposition products

Sulfur oxides. Carbon monoxide. Carbon dioxide.

# **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 additional affects 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

**Mixture** No data available.

# 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 (20 - 30%) CAS#: 7681-57-4	Rat LD <sub>50</sub>	500 mg/kg	None reported	None reported	No information available
Sodium dithionite (10 - 20%) CAS#: 7775-14-6	Mouse LD <sub>50</sub>	1500 mg/kg	None reported	None reported	ERMA
1,10-Phenanthroline, mono(4-methylbenze	Rat LD <sub>50</sub>	245.6 mg/kg	None reported	None reported	Internal Data

nesulfonate)			
(1 - 5%)			
CAS#: 92798-16-8			

#### Dermal Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium metabisulfite (20 - 30%)	Rat LD₅o	> 2000 mg/kg	None reported	None reported	LOLI
CAS#: 7681-57-4					

#### Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium metabisulfite (20 - 30%) CAS#: 7681-57-4	Rat LC <sub>50</sub>	> 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

ATEmix (oral)	No information available mg/kg
ATEmix (dermal)	9,549.30 mg/kg
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-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 (10 - 20%) 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.

Chemical name Test method Species Reported Exposure Results Key literature   dose time references and
---

# Product NameFerroVer® Iron ReagentRevision Date05-Apr-2023Page9 / 16

						sources for data
Sodium metabisulfite	Standard Draize	Rabbit	107 mg	None reported	Corrosive to eyes	RTECS
(20 - 30%)	Test		-	-	-	
CAS#: 7681-57-4						
Sodium dithionite	Standard Draize	Rabbit	100 mg	None reported	Eye irritant	IUCLID
(10 - 20%)	Test		-	-		
CAS#: 7775-14-6						

#### 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 (10 - 20%) 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 (20 - 30%) 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 (20 - 30%) CAS#: 7681-57-4	Rat TD⊾o	75 mg/kg	15 days	Biochemical Enzyme inhibition, induction, or change in blood or tissue levels (phosphatases and dehydrogenases) Kidney, Ureter, or Bladder	

				Other changes in urine composition	
Sodium dithionite (10 - 20%) 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,	92798-16-8	-	-	-	-
mono(4-methylbenzenesul					
fonate)					

#### Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 3 - Not classifiable as a human
	carcinogen
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 (10 - 20%) 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 (20 - 30%) CAS#: 7681-57-4	Cytogenetic analysis	Hamster ovary	0.18 mg/L	None reported	Positive test result for mutagenicity	RTECS
Sodium dithionite (10 - 20%) CAS#: 7775-14-6	Mutation in microorganisms	Salmonella typhimurium	None reported	None reported	Negative	IUCLID

# Mixture invivo Data

No data available.

Substance invivo 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 (10 - 20%) 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 (20 - 30%)	Rat TD⊾₀	20000 mg/kg	None reported	Effects on Newborn Stillbirth	RTECS
CAS#: 7681-57-4					

#### Aspiration hazard

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

#### **12. ECOLOGICAL INFORMATION**

Harmful to aquatic life with long lasting effects.

Ecotoxicity

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 (20 - 30%) CAS#: 7681-57-4	96 hours	Salmo gairdneri	LC <sub>50</sub>	15 mg/L	IUCLID
Sodium dithionite (10 - 20%) CAS#: 7775-14-6	96 hours	Leuciscus idus	LC <sub>50</sub>	>= 46 mg/L	IUCLID

# Product NameFerroVer® Iron ReagentRevision Date05-Apr-2023Page12 / 16

1,10-Phenanthroline,	96 hours	None reported	LC50	1353 mg/L	ECOSARS
mono(4-methylbenze					
nesulfonate)					
(1 - 5%)					
CAS#: 92798-16-8					

#### Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium dithionite (10 - 20%) CAS#: 7775-14-6	48 Hours	Daphnia magna	EC50	98 mg/L	IUCLID
1,10-Phenanthroline, mono(4-methylbenze nesulfonate) (1 - 5%) CAS#: 92798-16-8	48 Hours	None reported	LC50	717 mg/L	ECOSARS

#### Algae

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium metabisulfite (20 - 30%) CAS#: 7681-57-4	96 hours	Scenedesmus subspicatus	EC <sub>50</sub>	40 mg/L	IUCLID
1,10-Phenanthroline, mono(4-methylbenze nesulfonate) (1 - 5%) CAS#: 92798-16-8	96 hours	None reported	EC <sub>50</sub>	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

#### Mobility

#### Soil Organic Carbon-Water Partition Coefficient

Other adverse effects No information available

## **13. DISPOSAL CONSIDERATIONS**

log Kow ~ -1.33

log Koc ~ -0.03

#### Waste treatment methods

# Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Product Name FerroVer® Iron Reagent Revision Date 05-Apr-2023 **Page** 13/16

Contaminated packaging	Do not reuse empty containers.

**US EPA Waste Number** 

#### Not applicable

# **14. TRANSPORT INFORMATION**

DOT	Not regulated
<u>TDG</u>	Not regulated
IATA	Not regulated
IMDG	Not regulated
Note:	No special precautions necessary.

Additional information

# **15. REGULATORY INFORMATION**

National Inventories	
TSCA	Complies
DSL/NDSL	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories	
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL - Existing substances	Complies

KECL - Existing substances	Complies
PICCS	Does not comply
TCSI	Complies
AICS	Does not comply
NZIOC	Complies

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

#### **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA	311/312	Hazard	Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No

Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

#### U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues

Chemical name	U.S Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues
Sodium dithionite (10 - 20%) CAS#: 7775-14-6	Sabotage/Contamination

#### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

**IMERC:** Not applicable

#### U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium metabisulfite 7681-57-4	Х	Х	Х
Sodium dithionite 7775-14-6	Х	Х	Х

#### **U.S. EPA Label Information**

Chemical name	FIFRA	FDA
Sodium metabisulfite	-	21 CFR 182.3766
Sodium dithionite	-	21 CFR 182.90

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

# Special Comments

**Additional information** 

#### Global Automotive Declarable Substance List (GADSL)

Chemical name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thersholds
Sodium metabisulfite	Declarable Substance (LR)	None reported
7681-57-4	Prohibited Substance (LR)	

#### **NFPA and HMIS Classifications**

NFPA	Health hazards - 3	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 2 - *	Flammability - 0	Physical hazards - 0	Personal protection - X - I

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

ACGIH ATSDR CCRIS CDC CEPA CICAD ECHA EEA EPA ERMA ECOSARS FDA GESTIS HSDB INERIS IPCS INCHEM IUCLID NITE NIH NIOSH LOLI NDF NICNAS NIOSH IDLH OSHA PEEN RTECS SIDS SYKE USDA USDC WHO		CCRIS (Chemical Car CDC (Center for Disea CEPA (Canadian Env CICAD (Concise Inter ECHA (The European EEA (European Enviro EPA (Environmental F ERMA (New Zealands Estimation through EC FDA (Food & Drug Ac GESTIS (Information Insurance) HSDB (Hazardous Su INERIS (The National IPCS INCHEM (Intern IUCLID (The Internation Japan National Institute NIOSH (National Institute NIOSH (National Institute NIOSH (National Institute NIOSH (National Institute NIOSH (National Institute NIOSH (Cocupational F PEEN (Pan European RTECS (Registry of T SIDS (Screening Infor The Finnish Environm USDA (United States USDC (United States	ATSDR (Agency for Toxic Substances and Disease Registry) CCRIS (Chemical Carcinogenesis Research Information System) CDC (Center for Disease Control) CEPA (Canadian Environmental Protection Agency) CICAD (Concise International Chemical Assessment Documents) ECHA (The European Chemicals Agency) EEA (European Environment Agency) EPA (Environmental Protection Agency) ERMA (New Zealands Environmental Risk Management Authority) Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™ FDA (Food & Drug Administration) GESTIS (Information System on Hazardous Substances of the German Social Accident nsurance) HSDB (Hazardous Substances Data Bank) NERIS (The National Industrial Environment and Risks Institute) PCS INCHEM (International Programme on Chemical Safety) UCLID (The International Uniform Chemical Information Database) Japan National Institute of Technology and Evaluation (NITE) NIH (National Institute of Health) NOSH (National Institute of Health) NOLI (List of Lists - An International Chemical Regulatory Database) to data Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) mmediately Dangerous to Life or Health DSHA (Occupational Safety and Health Administration of the US Department of Labor) PEEN (Pan European Ecological Network) RTECS (Registry of Toxic Effects of Chemical Substances) SIDS (Screening Information Dataset) for High Volume Chemicals The Finnish Environment Institute (SYKE) JSDA (United States Department of Agriculture) JSDA (United States Department of Commerce) WHO (World Health Organization)				
Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION							
TWA	TWA (time-weight	ed average)	STEL	STEL (Short Term Exposure Limit)			
MAC	Maximum Allowab	le Concentration	Ceiling	Ceiling Limit Value			
Х	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			

			regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation

Product Name FerroVer® Iron Reagent Revision Date 05-Apr-2023 Page 16 / 16

C M	Carcinogen mutagen	R	Reproductive toxicant
Prepared By		Hach Product Compliance Department	
Issue Date		06-Aug-2020	
Revision Date		05-Apr-2023	
Revision Note		SDS sections updated 2	

#### **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.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY©2023

End of Safety Data Sheet