



Be Right™

SAFETY DATA SHEET

Issue Date 26-Sep-2016

Revision Date 30-Dec-2016

Version 3

Page 1 / 17

1. IDENTIFICATION

Product identifier

Product Name Sulfide 2 Reagent

Other means of identification

Product Code(s) 181732

Safety data sheet number M00435

Synonyms

Recommended use of the chemical and restrictions on use

Recommended Use Determination of sulfides.

Uses advised against None.

Restrictions on use None.

Details of the supplier of the safety data sheet

Manufacturer Address

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

Emergency telephone number

(303) 623-5716 - 24 Hour Service (515)232-2533 - 8am - 4pm CST

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

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

Respiratory sensitization	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1B

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word - Danger

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 2 / 17



Hazard statements

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317 - May cause an allergic skin reaction
H340 - May cause genetic defects
H350 - May cause cancer
H360 - May damage fertility or the unborn child EUH208 - May produce an allergic reaction

Precautionary statements

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P281 - Use personal protective equipment as required
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P284 - Wear respiratory protection
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves
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
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant

Other Information

Harmful to aquatic life with long lasting effects
Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Synonyms

Percent ranges are used where confidential product information is applicable.

Chemical Name	CAS No	Percent Range	HMRIC #
Potassium dichromate	7778-50-9	0.1 - 1%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician.
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.
Ingestion	IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.
Self-protection of the first aider	Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms	See Section 11: TOXICOLOGICAL INFORMATION.
-----------------	--

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Flammable properties

Substance does not burn.

Specific hazards arising from the chemical

May react violently with. Hydrazine. Hydroxylamine. reducers.

Hazardous combustion products This material will not burn.

Protective equipment and precautions for firefighters

Water runoff can cause environmental damage. Dike and collect water used to fight fire.

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.
EC Notice	Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

WHMIS Notice

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Avoid release to the environment. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Neutralize spill if necessary. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

Emergency Response Guide Number Not applicable

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium dichromate 0.1 - 1%	TWA: 0.05 mg/m ³	TWA: 5 µg/m ³ (vacated) Ceiling: 0.1 mg/m ³ Ceiling: 0.1 mg/m ³	IDLH: 15 mg/m ³ Cr(VI) TWA: 0.0002 mg/m ³ Cr

Chemical Name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick OEL	New Foundland & Labrador OEL
Potassium dichromate 0.1 - 1%	TWA: 0.05 mg/m ³ TWA: 0.5 mg/m ³	TWA: 0.025 mg/m ³ Ceiling: 0.1 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³

Chemical Name	Northwest Territories OEL	Nova Scotia OEL	Nunavut OEL	Ontario TWA	Prince Edward Island OEL
Potassium dichromate 0.1 - 1%	TWA: 0.05 mg/m ³ STEL: 0.15 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³ STEL: 0.15 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³

Chemical Name	Quebec OEL	Saskatchewan OEL	Yukon OEL
Potassium dichromate 0.1 - 1%	TWA: 0.05 mg/m ³ SKN+	TWA: 0.05 mg/m ³ TWA: 0.5 mg/m ³ STEL: 0.15 mg/m ³ STEL: 1.5 mg/m ³	STEL: 0.1 mg/m ³ TWA: 0.1 mg/m ³

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

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

Eye/face protection Wear tight sealing safety goggles and/or face protection shield.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off all contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Regular cleaning of equipment, work area and clothing is recommended.

Environmental exposure controls

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Gas Under Pressure Not classified according to GHS criteria

Appearance aqueous solution

Color orange

Odor None

Odor threshold No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	No data available	
pH	4.2	
Melting point/freezing point	~ 0 °C / 32 °F	Estimation based on theoretical calculation
Boiling point / boiling range	~ 100 °C / 212 °F	Estimation based on theoretical calculation
Evaporation rate	1 (water = 1)	Estimation based on theoretical

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 6 / 17

calculation

Vapor pressure	23.777 mm Hg / 3.17 kPa at 25 °C / 77 °F	Estimation based on theoretical calculation
Vapor density (air = 1)	0.62 (air = 1)	
Specific gravity (water = 1 / air = 1)	0.987	
Partition Coefficient (n-octanol/water)	Not applicable	
Soil Organic Carbon-Water Partition Coefficient	Not applicable	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	No data available	
Kinematic viscosity	No data available	

Solubility(ies)

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

Metal Corrosivity	Not classified as corrosive to metal according to GHS criteria
Steel Corrosion Rate	No data available
Aluminum Corrosion Rate	No data available
Bulk density	Not applicable
Explosive properties	Not classified according to GHS criteria.
Explosion data	No data available
Upper explosion limit	No data available
Lower explosion limit	No data available
Flammable properties	Not classified as flammable according to GHS criteria.
Flammability Limit in Air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Flash point	No data available

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 7 / 17

Method

No information available

Oxidizing properties

Not classified according to GHS criteria.

Reactivity properties

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

10. STABILITY AND REACTIVITY

Reactivity properties

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria

Chemical stability

Stable under recommended storage conditions.

Special dangers of the product

None reported

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Extreme temperatures. Poor Ventilation.

Incompatible materials

Hydrazine. Hydroxylamine.

Hazardous Decomposition Products

None known based on information supplied.

Explosive properties

Not classified according to GHS criteria.

Upper explosion limit

No data available

Lower explosion limit

No data available

Autoignition temperature

No data available

Sensitivity to Static Discharge

None reported

Sensitivity to Mechanical Impact

None reported

11. TOXICOLOGICAL INFORMATION

NIOSH (RTECS) Number

None reported

Information on Likely Routes of Exposure

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 8 / 17

Product Information	Respiratory sensitizer. Skin sensitizer.
Inhalation	May cause sensitization by inhalation.
Eye contact	No known effect based on information supplied.
Skin contact	May cause sensitization by skin contact.
Ingestion	No known effect based on information supplied.
Aggravated Medical Conditions	Respiratory disorders. Skin disorders.
Toxicologically synergistic products	None known.
Toxicokinetics, metabolism and distribution	No information available.

Product Acute Toxicity Data

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

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

ATEmix (oral)	15,625.00 mg/kg
ATEmix (inhalation-dust/mist)	58.75 mg/L
ATEmix (inhalation-vapor)	313.13 mg/L

Ingredient Acute Toxicity Data

Oral Exposure Route

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	Rat LD ₅₀	25 mg/kg	None reported	None reported	ERMA (New Zealand's Environmental Risk Management Authority)

Dermal Exposure Route

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	Rat LD ₅₀	1170 mg/kg	None reported	None reported	ERMA (New Zealand's Environmental Risk Management Authority)

Inhalation (Dust/Mist) Exposure Route

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	Rat LC ₅₀	0.094 mg/L	4 hours	None reported	ERMA (New Zealand's Environmental Risk Management Authority)

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route No data available

Product Skin Corrosion/Irritation Data

No data available.

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 9 / 17

Ingredient Skin Corrosion/Irritation Data

No data available

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

No data available

Sensitization Information

Product Sensitization Data

Skin Sensitization Exposure Route No data available.

Respiratory Sensitization Exposure Route No data available.

Ingredient Sensitization Data

Skin Sensitization Exposure Route No data available.

Respiratory Sensitization Exposure Route No data available.

Chronic Toxicity Information

Product Repeat Dose Toxicity Data

Oral Exposure Route No data available.

Dermal Exposure Route No data available.

Inhalation (Dust/Mist) Exposure Route No data available.

Inhalation (Vapor) Exposure Route No data available.

Inhalation (Gas) Exposure Route No data available.

Ingredient Repeat Dose Toxicity Data

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Chemical Name	CAS No	ACGIH	IARC	NTP	OSHA
Potassium dichromate	7778-50-9	A1	Group 1	Known	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	A1 - Known Human Carcinogen
IARC (International Agency for Research on Cancer)	Group 1 - Carcinogenic to Humans

Product Code(s) 181732
 Issue Date 26-Sep-2016
 Version 3

Product Name Sulfide 2 Reagent
 Revision Date 30-Dec-2016
 Page 10 / 17

NTP (National Toxicology Program)	Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)	X - Present

Product Carcinogenicity Data No data available

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Ingredient Carcinogenicity Data

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Product Germ Cell Mutagenicity *invitro* Data

No data available.

Ingredient Germ Cell Mutagenicity *invitro* Data

Chemical Name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	Micronucleus test	Human lymphocyte	0.3 mg/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	Morphological transformation	Human fibroblast	200 nmol/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	DNA damage	Human fibroblast	500 nmol/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 11 / 17

Inhalation (Vapor) Exposure Route

No data available

Inhalation (Gas) Exposure Route

No data available

Ingredient Germ Cell Mutagenicity *invivo* Data

Oral Exposure Route

No data available

Dermal Exposure Route

No data available

Inhalation (Dust/Mist) Exposure Route

No data available

Inhalation (Vapor) Exposure Route

No data available

Inhalation (Gas) Exposure Route

No data available

Oral Exposure Route

No data available

Dermal Exposure Route

No data available

Inhalation (Dust/Mist) Exposure Route

No data available

Inhalation (Vapor) Exposure Route

No data available

Inhalation (Gas) Exposure Route

No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	Mouse TD _{Lo}	1710 mg/kg	19 days	Effects on Embryo or Fetus Fetotoxicity (except death e.g. stunted fetus) Effects on Fertility Post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants) Specific Developmental Abnormalities Craniofacial (including nose and tongue)	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	Mouse TD _{Lo}	3420 mg/kg	None reported	Effects on Fertility Litter size (e.g. # fetuses per litter; measured before birth) Specific Developmental Abnormalities Skin and appendages	RTECS (Registry of Toxic Effects of Chemical Substances)

Dermal Exposure Route

No data available

Inhalation (Dust/Mist) Exposure Route

No data available

Inhalation (Vapor) Exposure Route

No data available

Inhalation (Gas) Exposure Route

No data available

12. ECOLOGICAL INFORMATION

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 12 / 17

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Product Ecological Data

Aquatic toxicity

Fish

No data available

Crustacea

No data available

Algae

No data available

Terrestrial toxicity

Soil

No data available

Vertebrates

No data available

Invertebrates

No data available

Ingredient Ecological Data

Aquatic toxicity

Fish

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	96 hours	<i>Lepomis macrochirus</i>	LC ₅₀	0.131 mg/L	ERMA (New Zealand's Environmental Risk Management Authority)

Crustacea

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	48 Hours	<i>Daphnia magna</i>	EC ₅₀	0.035 mg/L	ERMA (New Zealand's Environmental Risk Management Authority)

Algae

No data available

Terrestrial toxicity

Soil

No data available

Vertebrates

No data available

Invertebrates

No data available

Other Information

Canadian Environmental Protection Act (CEPA) - Domestic Substances List (DSL): Environmentally Hazardous Substances Categorizations				
Chemical Name	Category	Persistent	Bioaccumulation	Inherently Toxic to Aquatic Organisms
Potassium dichromate (0.1 - 1%) CAS#: 7778-50-9	Inorganics	Yes	No	Yes

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 13 / 17

Persistence and degradability

None known.

Product Biodegradability Data

No data available.

Ingredient Biodegradability Data

No data available

Bioaccumulation

None known.

Product Bioaccumulation Data

Test data reported below.

Ingredient Bioaccumulation Data

No data available

Additional information

Product Information

Partition Coefficient (n-octanol/water)

Not applicable

Ingredient Information

Mobility

Mobility in soil: High mobility. If available, see ingredient data below.

Product Information

Soil Organic Carbon-Water Partition Coefficient

Not applicable

Ingredient Information

No data available

Additional information

Water solubility

Product Information

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

Ingredient Information

<u>Chemical Name</u>	<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water solubility temperature °C</u>	<u>Water solubility temperature °F</u>
Potassium dichromate CAS#: 7778-50-9	Moderately soluble	430 mg/L	0 °C	32 °F

Other adverse effects

Contains a substance with an endocrine-disrupting potential.

13. DISPOSAL CONSIDERATIONS

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 14 / 17

Waste treatment methods

Disposal of wastes	Disposal should be in accordance with applicable regional, national, and local laws and regulations.
Contaminated packaging	Working in a well-ventilated area. Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state, or federal regulations. Dispose of empty container as normal trash. In the US, rinsate from empty containers is classified as hazardous waste and should be disposed of at an E.P.A. approved facility. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste in countries other than the US. Improper disposal or reuse of this container may be dangerous and illegal. Disposal should be in accordance with applicable regional, national, and local laws and regulations.
Special instructions for disposal	Dispose of material in an E.P.A. approved hazardous waste facility.

14. TRANSPORT INFORMATION

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

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.
If the item is part of a reagent set or kit the classification would change to the following:
UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.
If the item is not regulated, the Chemical Kit classification does not apply.

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	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
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

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 15 / 17

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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Potassium dichromate (CAS #: 7778-50-9)	0.1

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	Yes
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)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium dichromate 7778-50-9	10 lb	X	-	X

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

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium dichromate 7778-50-9	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Potassium dichromate (CAS #: 7778-50-9)	Carcinogen Developmental Female Reproductive Male Reproductive

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium dichromate 7778-50-9	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 16 / 17

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

Additional information

Global Automotive Declarable Substance List (GADSL)

Chemical Name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thresholds
Potassium dichromate 7778-50-9	Prohibited Substance (LR) Declarable Substance (LR)	0.0 % 0.1 %

Special Comments

None

NFPA and HMIS Classifications

NFPA	Health hazards - 2	Flammability - 0	Instability - 0	Physical and Chemical Properties SKN*
HMIS	Health hazards - 2	Flammability - 0	Physical hazards - 0	Personal protection - X - See section 8 for more information

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

NIOSH IDLH *Immediately Dangerous to Life or Health*
ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)
NDF *no data*

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
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		

Prepared By Hach Product Compliance Department

Issue Date 26-Sep-2016

Revision Date 30-Dec-2016

Revision Note None

Disclaimer

Product Code(s) 181732
Issue Date 26-Sep-2016
Version 3

Product Name Sulfide 2 Reagent
Revision Date 30-Dec-2016
Page 17 / 17

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©2016

End of Safety Data Sheet