

SAFETY DATA SHEET

Issue Date 01-Apr-2021

Revision Date 26-Jan-2024

Version 3.9

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1. IDENTIFICATION

<u>Product identifier</u> Product Name	Silica 3 Reagent
<u>Other means of identification</u> Product Code(s)	27169
Safety data sheet number	M00002

Recommended use of the chemical and restrictions on useRecommended UseLaboratory reagent.

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, +1(970) 669-3050

Emergency telephone number

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

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word None

Hazard statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Other Hazards Known

May be harmful if swallowed May be harmful in contact with skin May be harmful if inhaled

EN / AGHS

Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance_	
Chemical Name	Sodium sulfite
Chemical Family	Inorganic salt.
Formula	Na2ŠO3
CAS No	7757-83-7

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Sodium sulfite	7757-83-7	100%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. If symptoms persist, call a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Most important symptoms and effe	ects, both acute and delaved

Most important symptoms and effects, both acute and delayed

Symptoms Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians 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	No information available.
Hazardous combustion products	This material will not burn.
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 ec	uipment and emergency procedures
Personal precautions	Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required.
Other Information	Refer to protective measures listed in Sections 7 and 8.
Environmental precautions	
Environmental precautions	See Section 12 for additional ecological information.
Methods and material for containme	ent 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 breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust. Ensure adequate ventilation. Do not eat, drink or smoke when using this product.
Conditions for safe storage, in	cluding any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.
Flammability class	Not applicable
8	EXPOSURE CONTROLS/PERSONAL PROTECTION
	EXFOSURE CONTROLS/PERSONAL PROTECTION
Control parameters	

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
Appropriate engineering controls Engineering Controls	Showers Eyewash stations

Ventilation systems.

Individual protection measures, such as personal protective equipment

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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.			
Hand Protection	Wear suitable gloves.			
Eye/face protection	Wear safety glasses with side shields (or goggles).			
Skin and body protection	No special protective equipment required.			
General Hygiene Considerations	Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.			
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				

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Information on basic physical and chemical properties

Physical state Appearance Odor	crystalline None	Solid		Color Odor threshold	white No data available
Property			Values		Remarks • Method
Molecular weigh	t		126.04 g/mole		
рН			7		
Melting point / fro	eezing point		884 °C / 16	23.2 °F	
Initial boiling poi	nt and boiling rang	ge	1429 °C / 2	2604.2 °F	
Evaporation rate			Not applicable		
Vapor pressure			Not applicable		
Relative vapor de	ensity		No data avail	able	
Specific gravity -	VALUE 1		2.6		
Partition coeffici	ent		log K _{ow} ~ 0		
Soil Organic Car Coefficient	bon-Water Partitio	n	log K _{oc} ~ 0		
Autoignition tem	perature		No data availa	ble	
Decomposition t	emperature		No data availa	ble	
Dynamic viscosi	ty		Not applicable		
Kinematic viscos	sity		Not applicable		

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Completely soluble	47600 mg/L	0 °C / 32 °F
Completely soluble	427000 mg/L	81 °C / 177.8 °F

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
Acids	Soluble	> 1000 mg/L	25 °C / 77 °F
Glycerol	Soluble	> 1000 mg/L	25 °C / 77 °F
Ethyl alcohol	Insoluble	< 0.1 mg/L	25 °C / 77 °F

Other information

Metal Corrosivity

Steel Corrosion Rate Aluminum Corrosion Rate Not applicable Not applicable

Volatile Organic Compounds (VOC) Content

This Product is by Weight 100% an Individual Pure Chemical Substance

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Sodium sulfite	7757-83-7	No data available	-

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.

Chemical stability

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

None under normal processing.

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Conditions to avoid

Excessive heat.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

Sulfur oxides. Sodium monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	May be harmful by inhalation.
Eye contact	No known effect based on information supplied.
Skin contact	No known effect based on information supplied.
Ingestion	No known effect based on information supplied.
Symptoms	Coughing and/ or wheezing.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

If available, see ingredient data below.

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 sulfite (100%) CAS#: 7757-83-7	Rat LD50	3560 mg/kg	None reported	None reported	GESTIS

Dermal Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium sulfite (100%) CAS#: 7757-83-7	Rat LD₅o	2000 mg/kg	None reported	None reported	EPA

Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium sulfite (100%) CAS#: 7757-83-7	Rat LC50	5.5 mg/L	4 hours	None reported	ECHA

Inhalation (Vapor) Exposure Route

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Unknown Acute Toxicity

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

Acute Toxicity Estimations (ATE)

Not applicable

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

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

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

Mixture

If available, see ingredient data below.

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 sulfite (100%) CAS#: 7757-83-7	Standard Draize Test	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA

Serious eye damage/irritation

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

Mixture

If available, see ingredient data below.

Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium sulfite (100%) CAS#: 7757-83-7	Standard Draize Test	Rabbit	162 mg	None reported	Mild eye irritant	ECHA

Respiratory or skin sensitization

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

Mixture

If available, see ingredient data below.

Ingredient Sensitization Data

Test data reported below.

Respiratory Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium sulfite	Based on human	Human	Confirmed to be a respiratory	OECD 429: Skin Sensitization: Local

(100%)	experience	sensitizer	Lymph Node Assay
CAS#: 7757-83-	-7		

STOT - single exposure

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

Mixture

If available, see ingredient data below.

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

If available, see ingredient data below.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

Carcinogenicity

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

Mixture

If available, see ingredient data below.

Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Sodium sulfite	7757-83-7	-	Group 3	-	-

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

Germ cell mutagenicity

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

Mixture invitro Data

If available, see ingredient data below.

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 sulfite (100%) CAS#: 7757-83-7	Cytogenetic analysis	Mouse sperm cells	25 mg/L	None reported	Positive test result for mutagenicity	RTECS

Mixture invivo Data

If available, see ingredient data below.

Substance invivo Data

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No data available.

Reproductive toxicity

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

Mixture

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Aspiration hazard

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

12. ECOLOGICAL INFORMATION

Ecotoxicity	Based on available data, the classification criteria are not met.
Unknown aquatic toxicity	0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

<u>Mixture</u>

Aquatic Acute Toxicity If available, see ingredient data below.

Aquatic Chronic Toxicity If available, see ingredient data below.

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
Ī	Sodium sulfite (100%) CAS#: 7757-83-7	96 hours	Leuciscus idus	LC ₅₀	170 mg/L	OECD 429: Skin Sensitization: Local Lymph Node Assay

Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium sulfite (100%) CAS#: 7757-83-7	48 Hours	Daphnia magna	EC ₅₀	18 mg/L	OECD 429: Skin Sensitization: Local Lymph Node Assay

Algae

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium sulfite (100%) CAS#: 7757-83-7	None reported	Chlamydomonas reinhardtii	EC50	63 mg/L	OECD 429: Skin Sensitization: Local Lymph Node Assay

Aquatic Chronic Toxicity

No data available.

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Persistence and degradability				
Mixture No data available.				
<u>Bioaccumulation</u> There is no data for this product Mixture No data available.				
Partition coefficient		log K _{ow} ~ 0		
Mobility				
Soil Organic Carbon-Water Partitio	n Coefficient	log K₀c ~ 0		
Other adverse effects No information available				
	13. DISPOSAL (CONSIDERAT	IONS	
Waste treatment 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.			
Special instructions for disposal	Special instructions for disposal Work in an approved fume hood. Working in a large container, cautiously add small portions of the material to cold water with agitation. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. If permitted by regulation. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Check with national, local municipal and state authorities and waste contractors for pertinent local information on the disposal of this article.			
	14. TRANSPOR		ΠΟΝ	
DOT	Not regulated			
TDG	Not regulated			
IATA	Not regulated			
IMDG	Not regulated			
Note:	No special precautions r	ecessary.		
Additional information There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods.				

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		

EN / AGHS

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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

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

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

U.S. EPA Label Information

Chemical name	FIFRA	FDA
Sodium sulfite	180.0910	21 CFR 182.3798

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

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

Chemical name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thersholds
Sodium sulfite	Declarable Substance (LR)	None reported
7757-83-7	Prohibited Substance (LR)	

NFPA and HMIS Classifications

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

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	EPA (Environmental Protection Agency)				
ERMA	ERMA (New Zealands Environmental Risk Management Authority)				
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	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)				

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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
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.
SKN* RSP+ C M	Skin designation Respiratory sensitization Carcinogen mutagen		SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant
Prepared By		Hach Product Compliance Department		
Issue Date		01-Apr-2021		
Revision Date		26-Jan-2024		
Revision Note		None		
Disclaimer				

<u>Disclaimer</u>

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.

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End of Safety Data Sheet