

MOEL's Public Notice No. 2016-19 (Standards for Classification and Labeling of Chemical Substances and Safety Data Sheets)

WAI4 - KGHS - KOREAN Issue Date 05-Sep-2019 Revision Date 05-Sep-2019 Revision Number 1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name Silca Standard - 1 ppm

Product No 223030

Pure substance/mixture Mixture

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Use as laboratory reagent

Uses advised against No Information available

Supplier

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Made in USA

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

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Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity - (single exposure) Category 2 Category 2 Category 3

Environmental hazards

Based on available data, the classification criteria are not met

Label Elements



Signal Word Warning

Hazard Statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary Statements

Prevention

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P362 - Take off contaminated clothing and wash before reuse

P321 - Specific treatment (see supplemental first aid instructions on this label)

P332 + P313 - If skin irritation occurs: Get medical advice/ attention

P362 + P364 - Take off all contaminated clothing and wash it before reuse

P337 + P313 - If eye irritation persists: Get medical advice/ attention

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards

NFPA

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

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Component	Common Name	CAS-No	Index No.	Weight %
Water	No information available	7732-18-5	KE-35400	99 - 100
Sodium Metasilicate Nonahydrate	No information available	13517-24-3	Not listed	0.5 - 1

SECTION 4: FIRST AID MEASURES

First aid measures

If symptoms persist, call a physician. **General Advice**

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Move to fresh air. If not breathing, give artificial respiration. Get medical attention if Inhalation

symptoms occur.

Clean mouth with water and drink afterwards plenty of water. Ingestion

Self-Protection of the First Aider Use personal protective equipment. See section 8 for more information. Do not use

> mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device.

Most important symptoms and effects, both acute and delayed

Most important symptoms and

effects

None reasonably foreseeable

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

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

No information available.

Explosion Data

Sensitivity to Mechanical Impact None Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions Should not be released into 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.

Methods for Cleaning UpSoak up with inert absorbent material. Pick up and transfer to properly labeled containers.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Handling Wear personal protective equipment

Ensure adequate ventilation

Do not get in eyes, on skin, or on clothing

Avoid ingestion and inhalation

Conditions for Safe Storage, Including any Incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place

Store at room temperature in the original container

Keep away from direct sunlight

Incompatible Products

No information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Component	CAS-No	Korea	ACGIH TLV	OSHA PEL
Water	7732-18-5	Not listed	Not listed	Not listed
Sodium Metasilicate	13517-24-3	Not listed	Not listed	Not listed
Nonahydrate				

Component	CAS-No	European Union	The United Kingdom	Germany
Water	7732-18-5	Not listed	Not listed	Not listed
Sodium Metasilicate	13517-24-3	Not listed	Not listed	Not listed
Nonahydrate				

Biological Exposure Indices

Component	CAS-No	Biological Exposure Indices
Water	7732-18-5	Not listed
Sodium Metasilicate	13517-24-3	Not listed
Nonahydrate		

Appropriate engineering controls

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location

Individual protection measures, such as personal protective equipment

Personal protective equipment Use only those certified by the Korea Occupational Safety and Health Administration.

Eye/face Protection Wear chemical splash goggles and face shield. If splashes are likely to occur, wear:.

Face-shield.

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Remarks • Method

Skin and Body Protection Wear protective gloves/clothing.

Respiratory ProtectionNone under normal use conditions. In case of inadequate ventilation wear respiratory

protection.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid
Appearance Clear
Odor None

Odor Threshold No information available

pH 6.5 **PH Range** 5.0 - 8.0

<u>Property</u> <u>Values</u>

Melting point/freezing pointNo information availableBoiling Point/Range~ 100 °C / 212 °F

Flash Point (High in °C) N/A

Evaporation Rate No information available Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor Density
No information available

Water Solubility soluble

Solubility in other solventsPartition coefficient
No information available
No information available

Autoignition Temperature

Decomposition Temperature
Kinematic viscosity
No information available

Other Information

Softening Point
Molecular Weight
VOC Content(%)
Density
No information available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

No Information available

Chemical Stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing

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Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

No information available

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Inhalation Not an expected route of exposure.

Ingestion May be harmful if swallowed.

Eyes Avoid contact with eyes. Irritating to eyes.

Skin Avoid contact with skin. May cause irritation.

Information on Toxicological Effects

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

(b) skin corrosion/irritation; Category 2.

Sensitization No information available

Mutagenic Effects No information available

Carcinogenicity No information available.

Reproductive Effects No information available

STOT - single exposure No information available

STOT - repeated exposureNo information available

Target Organs None known.

Aspiration hazard No information available

Numerical measures of toxicity - Product Information

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

1% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and Degradability

Bioaccumulation/ Accumulation

No information available

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Mobility

Will likely be mobile in the environment due to its water solubility.

Other adverse effects

No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and **Waste Disposal Methods**

regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

SECTION 14: TRANSPORT INFORMATION

Not Regulated **Road and Rail Transport**

<u>IATA</u> Not regulated

IMDG/IMO Not regulated **Marine Pollutant** Not Applicable

Special Precautions for User No special precautions required

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Legend: X - Listed '-' - Not Listed

International Inventories

Component	CAS-No	KECL	TSCA	EINECS	IECSC	DSL	NDSL	PICCS	ENCS	AICS
Water	7732-18-5	KE-35400	X	231-791-2	X	X	-	Х	-	X
Sodium Metasilicate Nonahydrate	13517-24-3	-	-	-	Х	-	-	Х	-	-

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements		Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Water	7732-18-5	Not applicable	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential
Water	7732-18-5	Listed	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

Korean National Regulations

Component	CAS-No	Act on Registration and Evaluation of Chemical Substances (K-REACH)	Authorised Chemicals	Existing Substances Subject to Registration
Water	7732-18-5	Annex 1 - KE-35400 Exempt (Index No. 25)	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

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Component	CAS-No	Chemical Control Act - Toxic Chemicals	Chemical Control Act - Prohibited Chemicals	Chemical Control Act - Use Restricted Chemicals
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

Component	CAS-No	Chemical Control Act - Accident Precaution Chemicals (% in mixtures)	Chemical Control Act - Accident Precaution Chemicals - Quantity limits Storage (% in mixtures)	Chemical Control Act - Accident Precaution Chemicals - Quantity limits Manufacture/Use (% in mixtures)
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

Component	CAS-No	Waste Control Law	Ministry of Environment - CMR risk	Ministry of Environment - Critically Controlled Substance
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

Component	CAS-No	ISHA - Harmful Agents Subject to Work Environment Monitoring	ISHA - Prohibited substances	ISHA - Substances requiring permission
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

Component	CAS-No	ISHA - Substances subject to control	ISHA - Harmful Agents Requiring Health Examination	ISHA - Permissible Exposure Limits
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

Component	CAS-No		ISHA - Threshold Limit Values (TLVs) Chemicals	ISHA - Special management materials
		(minimum quantity)		
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

National Fire Association - Dangerous Substances Minimum quantity requiring a permit

Component	CAS-No	Class 1 - Oxidising solids	Class 2 - Flammable solid	Class 3 - Spontaneously Combustible Substances and Dangerous Substances When Wet	Class 4 - Flammable liquids	Class 5 - Self-reactive substances	Class 6 - Oxidising liquids
Water	7732-18-5	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Control Parameters

Component	CAS-No	Korea	Biological Exposure Indices
Water	7732-18-5	Not listed	Not listed
Sodium Metasilicate Nonahydrate	13517-24-3	Not listed	Not listed

<u>US Management Information</u> **OSHA** - Occupational Safety and Health Administration

Not applicable

Component CAS-No	Specifically Regulated	Highly Hazardous Chemicals
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		Chemicals	
Water	7732-18-5	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable

CERCLA Not applicable

Component	CAS-No	CERCLA EHS RQs	Hazardous Substances	SARA 313 - Threshold
_			RQs	Values %
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Sodium Metasilicate Nonahydrate	13517-24-3	Not applicable	Not applicable	Not applicable

CLP Classification - Regulation (EC) No 1272/2008

Warning.

H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P337 + P313 - If eye irritation persists: Get medical advice/ attention. P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. P312 - Call a POISON CENTER or doctor/ physician if you feel unwell. P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection. P332 + P313 - If skin irritation occurs: Get medical advice/ attention.

SECTION 16: OTHER INFORMATION

Prepared By Regulatory Affairs

Prepared For Thermo Fisher Scientific Inc.©

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Reason for revision Initial Release.

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End of Safety Data Sheet

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