

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 Silica Reagent #2
Product No 2030RE, 2230RE-2
Pure substance/mixture Mixture

Contains Tartaric Acid

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

Fisher Scientific Korea	Thermo Fisher Scientific©
D5,D6, Incheon Airport Logistics	Water and Lab Products
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Beon-Gil	1-978-232-6000
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E-mail address

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Emergency Telephone Number

Emergency telephone: Medical: +(82) 070-7686-0086 or + 1-703-741-5970
 CHEMTREC: 1-800-424-9300 or + 1-703-527-3887
 Korea: 00-308-13-2549 (24 hours a day, 7 days a week)

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

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Health hazards

Serious Eye Damage/Eye Irritation

Category 1

Environmental hazards

Based on available data, the classification criteria are not met

Label Elements



Signal Word

Danger

Hazard Statements

H318 - Causes serious eye damage

Precautionary Statements

Prevention

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

Response

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

Storage

P403 - Store in a well-ventilated place

Disposal

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

Other Hazards

NFPA

Health
2

Flammability
0

Instability
0

Physical hazards
N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Component	Common Name	CAS-No	Index No.	Weight %
Water	No information available	7732-18-5	KE-35400	70 - 80
Tartaric Acid	No information available	87-69-4	KE-10801	20 - 30
Tween 20	No information available	9005-64-5	KE-31681	<0.1

SECTION 4: FIRST AID MEASURES

First aid measures

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General Advice	If symptoms persist, call a physician.
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.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water.
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 Causes eye burns Causes severe eye damage

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

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 Up

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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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
Tartaric Acid	87-69-4	Not listed	Not listed	Not listed
Tween 20	9005-64-5	Not listed	Not listed	Not listed

Component	CAS-No	European Union	The United Kingdom	Germany
Water	7732-18-5	Not listed	Not listed	Not listed
Tartaric Acid	87-69-4	Not listed	Not listed	TWA: 2 mg/m ³ (8 Stunden). AGW - exposure factor 2 TWA: 2 mg/m ³ (8 Stunden). MAK Höhepunkt: 4 mg/m ³
Tween 20	9005-64-5	Not listed	Not listed	Not listed

Biological Exposure Indices

Component	CAS-No	Biological Exposure Indices
Water	7732-18-5	Not listed
Tartaric Acid	87-69-4	Not listed
Tween 20	9005-64-5	Not listed

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.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection None 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

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	None
Odor Threshold	No information available
pH	1.15
PH Range	0.9 - 2.2

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point/freezing point	No information available	
Boiling 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:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	-	
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other Information

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

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

No information available

Hazardous Decomposition Products

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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. Corrosive to the eyes and may cause severe damage including blindness.
Skin	Avoid contact with skin. Skin corrosion/irritation.

Information on Toxicological Effects

Symptoms No information available

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

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 exposure	No information available
Target Organs	None known.
Aspiration hazard	No information available

Numerical measures of toxicity - Product Information

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

24.313% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and Degradability

No information available

Bioaccumulation/ Accumulation

No information available

Mobility

No information available.

Other adverse effects

No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

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

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

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport

UN-No UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II

IATA

UN-No UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II

IMDG/IMO

UN-No UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II
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	-	X	-	X
Tartaric Acid	87-69-4	KE-10801	X	201-766-0	X	X	-	X	X	X
Tween 20	9005-64-5	KE-31681	X	-	X	X	-	X	X	X

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
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	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
Tartaric Acid	87-69-4	Listed	Not applicable	Not applicable
Tween 20	9005-64-5	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

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Water	7732-18-5	Annex 1 - KE-35400 Exempt (Index No. 25)	Not applicable	Not applicable
Tartaric Acid	87-69-4	Annex 1 - KE-10801	Not applicable	Not applicable
Tween 20	9005-64-5	Annex 1 - KE-31681	Not applicable	Not applicable

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
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	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
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	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
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	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
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	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
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	Not applicable	Not applicable	Not applicable

Component	CAS-No	ISHA - Subject to Process Safety Reports (minimum quantity)	ISHA - Threshold Limit Values (TLVs) Chemicals	ISHA - Special management materials
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	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
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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Control Parameters

Component	CAS-No	Korea	Biological Exposure Indices
Water	7732-18-5	Not listed	Not listed
Tartaric Acid	87-69-4	Not listed	Not listed
Tween 20	9005-64-5	Not listed	Not listed

US Management Information

OSHA - Occupational Safety and Health Administration

Not applicable

Component	CAS-No	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Water	7732-18-5	Not applicable	Not applicable
Tartaric Acid	87-69-4	Not applicable	Not applicable
Tween 20	9005-64-5	Not applicable	Not applicable

CERCLA

Not applicable

Component	CAS-No	CERCLA EHS RQs	Hazardous Substances RQs	SARA 313 - Threshold Values %
Water	7732-18-5	Not applicable	Not applicable	Not applicable
Tartaric Acid	87-69-4	Not applicable	Not applicable	Not applicable
Tween 20	9005-64-5	Not applicable	Not applicable	Not applicable

CLP Classification - Regulation (EC) No 1272/2008

Danger.

H318 - Causes serious eye damage.

P280 - Wear eye protection/ face protection. 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.

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