# thermo scientific

# SAFETY DATA SHEET

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 INTERCO Filling Solution for Reference Electrode 100031

**Product No** 503235-A01

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** 

#### **INTERCO Filling Solution for Reference Electrode 100031**

Based on available data, the classification criteria are not met

**Environmental hazards** 

Based on available data, the classification criteria are not met

Label Elements

Other Hazards

**NFPA** 

HealthFlammabilityInstabilityPhysical hazards00N/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	80 - 90
Potassium Chloride	No information available	7447-40-7	KE-29086	>=10 - 20
Triton® X-100	No information available	9002-93-1	KE-33568	<0.1

## **SECTION 4: FIRST AID MEASURES**

First aid measures

General Advice Use first aid treatment according to the nature of the injury. Get medical attention

immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

**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. Get medical attention

immediately if symptoms occur.

**Inhalation** Move to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

**Self-Protection of the First Aider** No special precautions required.

Most important symptoms and effects, both acute and delayed

Most important symptoms and

None reasonably foreseeable

effects

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Indication of any immediate medical attention and special treatment needed

#### **INTERCO Filling Solution for Reference Electrode 100031**

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.

## SECTION 7: HANDLING AND STORAGE

## **Precautions for Safe Handling**

Handling Wear personal protective equipment

Ensure adequate ventilation

Avoid contact with skin, eyes and 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
Potassium Chloride	7447-40-7	Not listed	Not listed	Not listed
Triton® X-100	9002-93-1	Not listed	Not listed	Not listed

#### **INTERCO Filling Solution for Reference Electrode 100031**

Component	CAS-No	European Union	The United Kingdom	Germany
Water	7732-18-5	Not listed	Not listed	Not listed
Potassium Chloride	7447-40-7	Not listed	Not listed	Not listed
Triton® X-100	9002-93-1	Not listed	Not listed	Not listed

**Biological Exposure Indices** 

Component	CAS-No	Biological Exposure Indices
Water	7732-18-5	Not listed
Potassium Chloride	7447-40-7	Not listed
Triton® X-100	9002-93-1	Not listed

#### **Appropriate engineering controls**

Engineering Measures None under normal use conditions

Individual protection measures, such as personal protective equipment

**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

#### 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** 7.0 **PH Range** 5.5 - 8.5

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

No information available

Melting point/freezing point

Boiling Point/Range

No information available

~ 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
No information available
No information available

Specific Gravity No information Water Solubility soluble

Solubility in other solvents

Partition coefficient

No information available
No information available

Autoignition Temperature -

#### **INTERCO Filling Solution for Reference Electrode 100031**

Decomposition TemperatureNo information availableKinematic viscosityNo information availableDynamic viscosityNo information availableExplosive PropertiesNo information availableOxidizing PropertiesNo 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

#### **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** No known effect based on information supplied.

**Eyes** Not an expected route of exposure.

**Skin** No known effect based on information supplied.

## 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

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#### **INTERCO Filling Solution for Reference Electrode 100031**

STOT - single exposure No information available

STOT - repeated exposure

No information available None known. **Target Organs** 

**Aspiration hazard** No information available

Numerical measures of toxicity - Product Information

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

ATEmix (oral) 17333 mg/kg

## SECTION 12: ECOLOGICAL INFORMATION

#### **Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Freshwater Algae	Freshwater Fish	Water Flea
Potassium Chloride	EC50: = 2500 mg/L, 72h	LC50: = 1060 mg/L, 96h static	EC50: = 83 mg/L, 48h Static
7447-40-7	(Desmodesmus subspicatus)	(Lepomis macrochirus)	(Daphnia magna)
		LC50: 750 - 1020 mg/L, 96h static	EC50: = 825 mg/L, 48h (Daphnia
		(Pimephales promelas)	magna)
			- · · · · · · · · · · · · · · · · · · ·

## Persistence and Degradability

#### **Bioaccumulation/ Accumulation**

No information available

#### **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** Improper disposal or reuse of this container may be dangerous and illegal.

## **SECTION 14: TRANSPORT INFORMATION**

Road and Rail Transport Not Regulated

IATA 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

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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	ı	X
Potassium Chloride	7447-40-7	KE-29086	X	231-211-8	Х	Х	-	Х	Х	X
Triton® X-100	9002-93-1	KE-33568	X	-	Х	Х	-	Х	-	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable	Not applicable
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Listed	Not applicable	Not applicable
Triton® X-100	9002-93-1	Not applicable	Not applicable	Not applicable

## **Korean National Regulations**

Component	CAS-No	Act on Registration and	Authorised Chemicals	Existing Substances
		Evaluation of Chemical		Subject to Registration
		Substances (K-REACH)		
Water	7732-18-5	Annex 1 - KE-35400	Not applicable	Not applicable
		Exempt (Index No. 25)		
Potassium Chloride	7447-40-7	Annex 1 - KE-29086	Not applicable	Not applicable
Triton® X-100	9002-93-1	Annex 1 - KE-33568	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable

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Triton® X-100 9002-93-1		Not applicable	Not applicable	Not applicable	
Component	CAS-No	ISHA - Substances	ISHA - Harmful Agents	ISHA - Permissible	

Component	CAS-No	ISHA - Substances subject to control	ISHA - Harmful Agents Requiring Health Examination	ISHA - Permissible Exposure Limits
Water	Water 7732-18-5		Not applicable	Not applicable
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Not listed	Not listed
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable
Triton® X-100	9002-93-1	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
Potassium Chloride	7447-40-7	Not applicable	Not applicable	Not applicable
Triton® X-100	9002-93-1	Not applicable	Not applicable	Not applicable

## CLP Classification - Regulation (EC) No 1272/2008

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

SECTION 16: OTHER INFORMATION	

#### **INTERCO Filling Solution for Reference Electrode 100031**

Revision Date 05-Sep-2019

Prepared By Regulatory Affairs

Prepared For Thermo Fisher Scientific Inc.©

Issue Date 05-Sep-2019

Revision Date 05-Sep-2019

Reason for revision Initial Release.

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

#### Disclaimer

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**End of Safety Data Sheet** 

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