

22 June 2016

1 Identification of the substance/mixture and of the company/undertaking

Trade name: 525-21; 525-22; 525-23; 525-24; 500-21; 500-22; 500-23; 500-24; 514-22; 512-23; 560-21; 560-22; 560-23; 560-24 (Conductivity Standards Solutions)

· Article Code: 3999960024; 3999960025; 3999960026; 3999960027; 3999960035; 3999960036; 3999960037; 3999960038; 3999960110; 3999960111; 3999960144; 3999960145; 3999960191; 3999960192

- Application for laboratory and industrial use

• Manufacturer/Supplier:

HORIBA Instruments (Singapore) Pte Ltd 83 Science Park Drive #02-02A, The Curie, Singapore 118258 Contact No.: 65 6908 9660

2 Hazards identification

• Classification of the substance or mixture The product is classified as non- hazardous according to the Globally Harmonized System (GHS).

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Symbols (S) - Not applicable

- *R*-phrases (S) Not applicable
- · Information concerning particular hazards for human and environment:

The product does not have to be labeled due to the calculation procedure of international guidelines.

• Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

· Labeling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

- GHS label elements Void • Classification system:
- NFPA ratings (scale 0 4)

 $\begin{array}{c} \textbf{Health} = 0\\ Fire = 0\\ Reactivity = 0 \end{array}$

3 Composition/information on ingredients				
· Chemical characterization: Mixtures				
· Componen	ts:			
7447-40-7	potassium chloride	<8%		
7732-18-5	water, distilled, conductivity or of similar purity	>92%		



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· HMIS-ratings (scale 0 - 4)



4 First aid measures

- · General information: No special measures required.
- · After inhalation:
- Remove the victim to fresh air, and make him blow his nose and gargle. Refer for medical attention.
- After skin contact: Wash the affect areas under running water.
- · After eye contact:

Immediately rinse the affected eyes with running water for at least 15 minutes, and refer for medical attention.

· After swallowing: Give the victim water. If necessary, get medical attention.

5 Firefighting measures

- Suitable extinguishing agents: This product is noncombustible.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow product to reach sewage system or any water course.
- · Methods and material for containment and cleaning up:
- Sweep up and place in a vessel. Flush residual area with water.
- Reference to other sections No dangerous substances are released.

7 Handling and storage

- · Handling:
- \cdot Precautions for safe handling
- Keep receptacles tightly sealed.
- Keep away from heat and direct sunlight.
- · Information about protection against explosions and fires: No special measures required.
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- \cdot Further information about storage conditions:
- Keep receptacle tightly sealed. Protect from heat and direct sunlight.
- Specific end use(s) No further relevant information available.



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8 Exposure controls/personal protection

- Additional information about design of technical systems:
- Provide good ventilation. Make available washbasin and eye wash near the work area.
- Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.
- · Personal protective equipment:
- General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Suitable respiratory protective device recommended.
- Protection of hands:
- *The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- · Penetration time of glove material
- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Goggles recommended during refilling.
- **Body protection:** Use protective suit.

General Information	
Appearance	T · · · J
	Liquid
Color:	Colorles
Odor:	S
Change in condition Melting point/Melting range: Boiling point/Boiling range:	
Flash point:	Not applicable.
Auto igniting:	Product is not self igniting.
Danger of explosion:	Product does not present an explosion hazard.
Density:	Not determined.



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• Other information

No further relevant information available.

10 Stability and reactivity

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

• *Incompatible materials:* No further relevant information available.

• Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

7447-40-7 potassium chloride

Oral LD50 383 mg/kg (mouse)

- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

• Aquatic toxicity: No further relevant information available.

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water

13 Disposal considerations

- Waste treatment methods
- Recommendation: Must be specially treated adhering to official regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.



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14 Transport information

· UN-Number		
· DOT, ADR, ADN, IMDG, IATA	Void	
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA		
· Class	Void	
· Packing group		
· DOT, ADR, IMDG, IATA	Void	
· Environmental hazards:		
· Marine pollutant:	No	
· Special precautions for user	Not applicable.	
· Transport/Additional information:	Check the containers are tightly sealed. Handle carefully so that they will not be damaged by falling or dropping. Keep away from water.	
· UN ''Model Regulation'':	Not applicable.	

15 Regulatory information

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· Sara			
· Section 355 (extremely hazardous substances):			
None of the ingredients is listed.			
· Section 313 (Specific toxic chemical listings):			
None of the ingredients is listed.			
· TSCA (Toxic Substances Control Act):			
All ingredients are listed.			
· Proposition 65			
· Chemicals known to cause cancer:			
None of the ingredients is listed.			
· Chemicals known to cause reproductive toxicity for females:			
None of the ingredients is listed.			
· Chemicals known to cause reproductive toxicity for males:			
None of the ingredients is listed.			
· Chemicals known to cause developmental toxicity:			
None of the ingredients is listed.			

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· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

• TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

Product related hazard informations: Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.

· National regulations:

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

HORIBA, Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensives or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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· Division issuing MSDS: Water Quality Instruments division.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organization

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

- NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent