

# MATERIAL SAFETY DATA SHEET

ACCORDING TO DIRECTIVE

91/155/EEG-2001/58/EC

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY**

Identification of the substance / preparation:

**BRIDGE KCl / KNO<sub>3</sub>-SOLUTION**Use of the substance / preparation: Electrolyte for pH / Redox sensors  
Sensor type(s): SR20(D)-AP26Company identification: Yokogawa Europe BV    Databankweg 20    3821 AL Amersfoort    The Netherlands  
Phone: +31 (0)33 4641611 Fax:+31 (0)33 4641610 E-mail: info@nl.yokogawa.com www.yokogawa-europe.com/eu

Emergency: Phone: +31 (0)33 4641611

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	Content	Formula	symbol letters	R phrases	EINECS nr.	CAS nr.
Potassium Chloride	<10%	KCl	n.a.	n.a.	231-211-8	7447-40-7
Potassium Nitrate	<25%	KNO <sub>3</sub>	O	R8	231-818-8	7757-79-1
Sodium Nitrate	<2%	NaNO <sub>3</sub>	O	R8	231-554-3	7631-99-4
Hydroxy Ethyl Cellulose	<10%		n.a.	n.a.	Polymer	009004-62-0

**3. HAZARDS IDENTIFICATION**

No specific hazards are identified since material is contained in sensor.

Danger classification: Potential hazards only occur by breakage of the electrode.  
Hazards to man and the environment: Take care to prevent cuts and or injury due to broken glass.**4. FIRST AID MEASURES**After inhalation: Not applicable.  
After skin contact: Wash with plenty of water.  
After eye contact: Rinse opened eye for several minutes under running water.  
After swallowing: Rinse out mouth and then drink plenty of water. In case of persistent symptoms consult doctor.**\*\*Consult a doctor if victim is feeling unwell.****5. FIRE-FIGHTING MEASURES**Suitable extinguishing media: Water, CO<sub>2</sub>, foam, powder.  
Combustion products, resulting gases: KCl-solutions are not combustible, formation of poisonous gases during heating or in fires due to potassium and sodium nitrate.  
Protective equipment: No special measures required.  
Special risks: When water is evaporated the remaining potassium chloride may result in toxic fumes.**6. ACCIDENTAL RELEASE MEASURES**Personal precautions: Avoid contact with skin and eyes.  
Methods for cleaning up: Take up with liquid absorbing material. Forward for disposal rinse or clean with water.**7. HANDLING AND STORAGE**

No specific instructions are required since material is contained in sensor.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

No specific requirements are applicable since material is contained in sensor.

**K1220QN**Date of issue:  
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Smell	Odorless
pH	4-8
Boiling point/boiling range	100° - 104°C
Solubility in water	100 % soluble
Relative density	1.0 – 1,2 kg/l

## 10. STABILITY AND REACTIVITY

**Conditions to avoid:** No particular information available.  
**Materials to avoid:** Corrosive to metals.  
**Hazardous decomposition products:** None.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Acute toxicity of pure 100% potassium chloride: LD50 (oral, rat): 2600 mg/kg.  
**Primary effect on the skin and eye:** Possible irritation.  
**After swallowing:** Swallowing large amounts may result in nausea, vomiting and cardiovascular disorders.  
**Additional toxicological information:** When used and handled according to specifications, the product does not have any harmful effects.

## 12. ECOLOGICAL INFORMATION

No ecological problems are to be expected when the product is handled and used with due care and attention.

## 13. DISPOSAL CONSIDERATIONS

Dispose contaminated wipes, absorbing materials and residual product material according to regulations.

## 14. TRANSPORT INFORMATION

Non-hazardous material. Not subject to transport regulations.

## 15. REGULATORY INFORMATION

**Danger classification:** Not applicable.

**List of relevant Risk phrases:** Not applicable.

**List of relevant Safety phrases:** Not applicable.

### Designation according to EC guidelines:

The material is not subject to classification according to EC lists and other sources of literature known to us.  
Observe the normal safety regulations when handling chemicals.

## 16. OTHER INFORMATION

The above information is based on the present state of knowledge and is believed to be correct. Its purpose is to characterize the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. The material safety data sheets will be available in other languages on our website.

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