

## 1. Identification of the Substance / Preparation and Company

1.1	<b>Product Details</b>	<b>Gonotec Calibration Standard 100 mOsmol/kg</b> <b>Gonotec Calibration Standard 300 mOsmol/kg</b> <b>Gonotec Calibration Standard 500 mOsmol/kg</b> <b>Gonotec Calibration Standard 850 mOsmol/kg</b> <b>Gonotec Calibration Standard 2000 mOsmol/kg</b> <b>Reference Solution OSMOREF<sup>®</sup> 290 mOsmol/kg</b>	REF 30.9.0100 REF 30.9.0020 REF 30.9.0500 REF 30.9.0850 REF 30.9.2000 REF 30.9.0290
1.2	<b>Identification of the Manufacturer / Supplier</b>	<b>Gonotec</b> <b>Gesellschaft für Meß- und Regeltechnik mbH</b> <b>Eisenacher Str. 56</b> <b>D-10823 Berlin</b> <b>Telefon: +49-(0)30-7809588-0</b> <b>Telefax: +49-(0)30-7809588-88</b> <b>Hr. Höpcke - ☎ +49-(0)30-7809588-55</b> <b>13.08.2007</b>	
1.2.1	Information Provider by / Telephone		
1.2.3	Issued / Revised on:		

## 2. Composition / Information on Ingredients

2.1	<b>Chemical Characterization (single substance)</b>	
2.1.1	CAS no. (notation according to EEC)	7647-14-5 sodium chloride (NaCl) 7732-18-5 water (H <sub>2</sub> O)
2.1.2	Additional Information	-
2.2	<b>Chemical Characterization (Preparation)</b>	
2.2.1	Specification	NaCl in aqueous solution. Concentration in mOsmol/kg (NaCl/H <sub>2</sub> O), see 1.1
2.2.2	Hazardous Ingredients	no
2.2.3	EINECS no.	-
2.2.4	Other Data	-

## 3. Hazards Identification

3.1	<b>Indication of Danger</b>	No hazardous product according to EC Directive 67/548/EWG and the Chemicals Act.
3.2	<b>Special Risks to Human and Environment</b>	no

## 4. First Aid Measures

4.1	<b>General Information</b>	No special measures necessary.
4.2	<b>After Inhalation</b>	-
4.3	<b>After Skin Contact</b>	Flush immediately with copious quantities of water.
4.4	<b>After Eye Contact</b>	Causes irritation. Flush immediately with copious quantities of tepid water for at least 5 minutes.
4.5	<b>After Ingestion</b>	In case of queasiness summon a doctor immediately.
4.6	<b>Notes for the Doctor</b>	-

## 5. Firefighting Measures

5.1	<b>Extinguisher Media</b>	As appropriate for surrounding fire and materials.
5.2	<b>Extinguisher media that must not be used for safety reasons</b>	-
5.3	<b>Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases</b>	No hazardous substances leak.
5.4	<b>Special Protective Equipment for Firefighting</b>	Firefighters should use self-contained breathing equipment and protective clothing.
5.5	<b>Other Data</b>	This material is assumed to be non-combustible.

## 6. Accidental Release Measures

- 6.1 Personal Precautions** Not necessary. Material is assumed to be non-combustible.
- 6.2 Environmental Precautions** Do not discharge into surface waters/groundwater.
- 6.3 Methods for Cleaning Up / Taking Up** Pick up with absorbent material. Send in suitable containers for disposal. Flush with copious quantities of water.
- 6.4 Other Data** No hazardous substances leak.

## 7. Handling and Storage

- 7.1 Handling**
- 7.1.1 Advice on safe handling No particular measures necessary.
- 7.1.2 Advice on fire and explosion protection. No. This material is assumed to be non-combustible.
- 7.2 Storage**
- 7.2.1 Requirements for storage rooms and vessels No special requirements.
- 7.2.2 Hints on storage assembly n/f
- 7.2.3 Further information on storage conditions Unopened between 5°C...45°C (41 - 113°F)
- 7.2.4 Storage-class (LGK) 10-13 other liquids and solids

## 8. Exposure controls / personal protection

- 8.1 Additional Hints on Design of Technical Facilities**
- 8.2 Ingredients with occupational exposure limits to be monitored** No particular measures necessary.
- 8.2.1 CAS no., Notation, Constitution, Value, Unit n/f
- 8.2.2 Additional Information -
- 8.3 Personal Equipment**
- 8.3.1 Respiratory Protection -
- 8.3.2 Hand Protection Safety Gloves (alkali-resistant)
- 8.3.3 Eye Protection Safety Goggles
- 8.3.4 Skin Protection Clothing as usual in the chemical industry
- 8.3.5 General Protective and Hygiene Measures Observe the usual precautions when handling chemicals. Avoid contact with eyes and skin. Use barrier skin cream.
- 8.3.6 Hygiene Measures Do not eat and drink at work. Before pauses and after work clean hands.

## 9. Physical and Chemical Properties

- 9.1 Appearance**
- 9.1.1 Form Aqueous solution in OPC-ampoules
- 9.1.2 Colour Colourless
- 9.1.3 Odour Odourless
- 9.2 Safety Data (value, range, method- 67/548/EG)**
- 9.2.1 pH-value T=20°C Approx. 5.5
- 9.2.2 Changes in physical state – Melting Point (NaCl) 801 °C (1473.8°F)
- 9.2.3 Boiling Point (NaCl) 1413 °C (2575.4°F)
- 9.2.4 Flash Point n/f
- 9.2.5 Flammability (solid/gas) Not Inflammable
- 9.2.6 Ignition Point n/f
- 9.2.7 Autoflammability n/f
- 9.2.8 Oxidizing Properties n/f
- 9.2.9 Explosion Properties Not Explosive
- 9.2.10 Flammable Limit UFL n/f  
LFL n/f
- 9.3 Other Data** -

## 10. Stability and Reactivity

10.1	Conditions to Avoid	n/f
10.2	Material to Avoid	n/f
10.3	Hazardous Decomposition Products	n/f
10.4	Other Data	-

## 11. Toxicological Information

11.1	<b>Toxicological Assay</b>	
11.1.1	Acute Toxicity (NaCl)	D <sub>50</sub> oral/Ratte: 3000 mg/kg
11.1.2	Specific Symptoms in the Animal Experiment	-
11.1.3	Stimulus- / Caustic-Effect	-
11.1.4	Allergisation	n/f (in these concentrations)
11.1.5	Effect after strobe or continuing Exposure	-
11.1.6	Carcinogenic, Mutagenic, Toxic for Reproduction Effect	-
11.1.7	Miscellaneous	Poison-Class (CH): F (free)
11.2	<b>Practical Experience</b>	
11.2.1	Relevant Observations	-
11.2.2	Other Observations	-
11.4	<b>Other Data</b>	Even after long years of handling this product appropriately, no adverse health effects are known.

## 12. Ecological Information

12.1	<b>Data on Elimination (Persistence an Degradability)</b>	
12.2	<b>Environment-Compartment Proceeding</b>	n/f
12.3	<b>Ecotoxic Effect</b>	
12.3.1	Aquatic Toxicity	-
12.3.2	Plants and Terrestrial Animals	-
12.4	<b>Other Adverse Effects</b>	
12.4.1	CSB-Value	mg/kg
12.4.2	BSB <sub>5</sub> - Value	mg/g
12.4.3	AOX-Value	Product has no organohalogen compounds and does not redound to the AOX-Value.
12.4.4	Product Contains Compositions of Heavy Metal and Chemical Compounds According to Directive 76/464 EEC	No
12.4.5	General Remarks	NaCl solutions have corrosive characteristics on many metals.

## 13. Disposal Considerations

13.1	<b>Product</b>	
13.1.1	Recommendation	Handle this product according to established good laboratory practise. Transfer the solution in containers for neutral aqueous solutions. Observe local requirements for disposal of chemicals and rest material. Never dispose remainders in house rubbish/sink/WC.
13.2	<b>Uncleaned Packing</b>	
13.2.1	Recommendation	Dispose according to local requirements (law).
13.2.2	Recommended Purifying Agent	-

## 14. Transport Information

**No Hazardous Good  
According to  
Transport Regulations**

## 15. Regulatory Information

### 15.1 Labelling According to EC Directive

15.1.1	Labelling	According to EC Directive/Ordinance on Hazardous Substances / Chemical Act labelling is not required - the general precautions when dealing with chemicals have to be observed.
15.1.2	Code Letter/Indication of Danger	No
15.1.3	Regulatory Components	No
15.1.4	R Phrases	No
15.1.5	S Phrases	S 1/2 To be stored locked and kept out of reach of children. S 24/25 Avoid contact with eyes and skin. S 26 After contact rinse eyes thoroughly with water and see an eye specialist.
15.1.6	Special Labelling	-

### 15.2 National Provisions

15.2.1	Hints on Job Activity Restrictions	n/f
15.2.2	Statutory Order on Hazardous Incidents	n/f
15.2.4	Technical Guidance Air	-
15.2.5	Water-Endangering Class	WGK 1: (weak)
15.2.7	Other Provisions	
	Austrian Chemical Act	No requirement to label
	Poison-Class CH	F (free)

## 16. Other Information

n/f = not found

16.1	Modified	30.10.2007
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*Specifications made in this Material Security Data Sheet are only valid for the mentioned product. They do not apply when the product is used with other materials or in other manufacturing processes. These specifications are based on our today's knowledge and experience and serve to describe the product in respect to safety precautions. They do not serve as warranty of a quality.*