




SDS	REF 30.9.0020	<b>Safety Data Sheet</b> <i>acc. to ISO/DIS 11014 and</i> <i>(EC) No. 1907/2006 (REACH)</i>	
	REF 30.9.0100		
	REF 30.9.0290		
	REF 30.9.0500		
	REF 30.9.0850		
	REF 30.9.2000		
REF 60.9.0100			

<b>1. Identification of the Substance / Preparation and of the Company / Undertaking</b>			
1.1	<b>Product Details</b>	Gonotec Calibration Standard 100 mOsmol/kg Gonotec Calibration Standard 300 mOsmol/kg Gonotec Calibration Standard 500 mOsmol/kg Gonotec Calibration Standard 850 mOsmol/kg Gonotec Calibration Standard 2000 mOsmol/kg Reference Solution OSMOREF® 290 mOsmol/kg Gonotec Standard Solution 100 mmol/l	REF 30.9.0100 REF 30.9.0020 REF 30.9.0500 REF 30.9.0850 REF 30.9.2000 REF 30.9.0290 REF 60.9.0100
1.2	<b>Use of the preparation</b>	Gonotec standards are aqueous solutions used to calibrate and/or check the performance of Osmometer and Chloride Meter by qualified personnel.	
1.3	<b>Identification of the Manufacturer / Supplier</b>	Gonotec Gesellschaft für Meß- und Regeltechnik mbH GSG-Hof Reuchlinstr. 10-11 D-10553 Berlin Telefon: +49-(0)30-7809588-0 Telefax: +49-(0)30-7809588-88 Mr. Höpcke @ p.hoepcke@gonotec.com 16.07.2015	
1.3.1	Information Provider by / eMail	Version 1.0	
1.3.2	Issued / Revised on:		
<b>2. Hazards Identification</b>			
2.1	<b>Hazards description</b>	Contact with the eyes can cause irritation.	
2.1.1	<b>Classification (1272/2008/EC) GHS/CLP</b>	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. (GHS/CLP)	
	<b>Classification (67/548/EEC,1999/45/EC)</b>	Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.	
2.2	<b>Label elements</b>	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. (GHS/CLP) Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC. R-phrases/S-phrases: not applicable.	
	<b>OSHA hazard overview (Criteria according to 29CFR1910.1200)</b>	Not applicable	
	<b>NFPA ratings (scale 0 - 4)</b>	Health = 0 Fire = 0 Reactivity = 0	
	<b>HMIS-ratings (scale 0 - 4)</b>	Health = 0 Fire = 0 Reactivity = 0	
2.3	<b>Other hazards</b>	This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).	


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<b>3. Composition / Information on Ingredients</b>		
<b>3.1 Chemical Characterization (single substance)</b>		
3.1.1 CAS no. (notation according to EEC)		7647-14-5 sodium chloride (NaCl) 7732-18-5 water (H <sub>2</sub> O)
3.1.2 Additional Information		-
<b>3.2 Chemical Characterization (Preparation)</b>		
3.2.1 Specification		NaCl in aqueous solution. Concentration in mOsmol/kg and mmol/l (NaCl/H <sub>2</sub> O), see 1.1
3.2.2 Hazardous Ingredients		no
3.2.3 EINECS no.		See 15.3 International Inventories
3.2.4 Other Data		-
<b>3.3 Indication of Danger</b>		Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. (GHS/CLP) Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.
<b>3.4 Special Risks to Human and Environment</b>		No
<b>4. First Aid Measures</b>		
<b>4.1 General Information</b>		No special measures necessary.
<b>4.2 After Inhalation</b>		-
<b>4.3 After Skin Contact</b>		Flush immediately with copious quantities of water.
<b>4.4 After Eye Contact</b>		Causes irritation. Flush immediately with copious quantities of tepid water for at least 5 minutes.
<b>4.5 After Ingestion</b>		In case of queasiness summon a doctor immediately.
<b>4.6 Notes for the Doctor</b>		-
<b>5. Firefighting Measures</b>		
<b>5.1 Extinguisher Media</b>		As appropriate for surrounding fire and materials.
<b>5.2 Extinguisher media that must not be used for safety reasons</b>		-
<b>5.3 Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases</b>		No hazardous substances leak.
<b>5.4 Special Protective Equipment for Firefighting</b>		Firefighters should use self-contained breathing equipment and protective clothing.
<b>5.5 Other Data</b>		This material is assumed to be non-combustible.
<b>6. Accidental Release Measures</b>		
<b>6.1 Personal Precautions</b>		Not necessary. Material is assumed to be non-combustible.
<b>6.2 Environmental Precautions</b>		Do not discharge into surface waters/groundwater.
<b>6.3 Methods for Cleaning Up / Taking Up</b>		Pick up with absorbent material. Send in suitable containers for disposal. Flush with copious quantities of water.
<b>6.4 Other Data</b>		No hazardous substances leak.
<b>7. Handling and Storage</b>		
<b>7.1 Handling</b>		
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.
<b>7.2 Storage</b>		
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 (German)		10-13 other liquids and solids
<b>8. Exposure controls / personal protection</b>		



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<b>8.1</b>	<b>Additional Hints on Design of Technical Facilities</b>	
<b>8.2</b>	<b>Ingredients with occupational exposure limits to be monitored</b>	No particular measures necessary.
8.2.1	CAS no., Notation, Constitution, Value, Unit	n/f
8.2.2	Additional Information	-
<b>8.3</b>	<b>Personal Equipment</b>	
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.
<b>9.</b>	<b>Physical and Chemical Properties</b>	
<b>9.1</b>	<b>Appearance</b>	
9.1.1	Form	Liquid (Aqueous solution in OPC-ampoules)
9.1.2	Colour	Colourless
9.1.3	Odour	Odourless
<b>9.2</b>	<b>Safety Data (value, range, method- 67/548/EG)</b>	
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	n/f
	UFL	n/f
	LFL	n/f
<b>9.3</b>	<b>Other Data</b>	-
<b>10.</b>	<b>Stability and Reactivity</b>	
<b>10.1</b>	<b>Conditions to Avoid</b>	Incompatible products, Excess heat.
<b>10.2</b>	<b>Material to Avoid</b>	n/f
<b>10.3</b>	<b>Hazardous Decomposition Products</b>	Hydrogen chloride gas. Sodium oxides..
<b>10.4</b>	<b>Other Data</b>	

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## 11. Toxicological Information

### 11.1 Toxicological Assay

#### 11.1.1 Acute Toxicity (NaCl)

D<sub>50</sub> oral/Ratte: 3000 mg/kg; Method: OECD 401  
 D<sub>50</sub> dermal/Ratte: >10000 mg/kg;

The solution has no acute oral/dermal toxicity,  
 Contains no hazardous ingredients according to GHS

#### 11.1.2 Acute inhalation toxicity

The solution has no acute oral toxicity,  
 Contains no hazardous ingredients according to GHS

#### 11.1.3 Acute dermal toxicity

The solution has no acute oral toxicity,  
 Contains no hazardous ingredients according to GHS

#### 11.1.4 Skin corrosion/irritation

Result: not known in this concentration, Contains no  
 hazardous ingredients according to GHS

#### 11.1.5 Serious eye damage/eye irritation

Contact with the eyes can cause irritation, Contains no  
 hazardous ingredients according to GHS

#### 11.1.6 Respiratory or skin sensitization

Result: Does not cause skin sensitization., Contains no  
 hazardous ingredients according to GHS

Result: Does not cause respiratory sensitization.,  
 Contains no hazardous ingredients according to GHS

#### 11.1.7 Carcinogenicity

Contains no ingredient listed as a carcinogen

#### 11.1.8 Reproductive toxicity

Contains no ingredient listed as toxic to reproduction

#### 11.1.9 Teratogenicity

Contains no ingredient listed as toxic to reproduction

#### 11.1.10 STOT - single exposure

Assessment: The solution is not classified as specific  
 target organ toxicant, single exposure.  
 Remarks: Contains no hazardous ingredients  
 according to GHS

#### 11.1.11 STOT - repeated exposure

Assessment: The solution is not classified as specific  
 target organ toxicant, repeated exposure.  
 Remarks: Contains no hazardous ingredients  
 according to GHS

### 11.2 Practical Experience

#### 11.2.1 Relevant Observations

IARC (International Agency for Research on Cancer)  
 NTP (National Toxicology Program)

Poison-Class (CH): F (free)


Substance is not listed

Substance is not listed


### 11.4 Other Data

The product contains no substances classified as  
 hazardous to health in concentrations which should be  
 taken into account. Health injuries are not known or  
 expected under normal use.



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<b>12. Ecological Information</b>		
12.1	<b>Data on Elimination (Persistence and Degradability)</b>	Not applicable
12.2	<b>Environment-Compartment Proceeding</b>	Quantitative data on the ecological effect of this product are not available.
12.3	<b>Ecotoxic Effect</b>	
12.3.1	Aquatic Toxicity	Contains no hazardous ingredients according to GHS
12.3.2	Plants and Terrestrial Animals	Contains no hazardous ingredients according to GHS
12.4	<b>Other Adverse Effects</b>	
12.4.1	CSB-Value	mg/kg -
12.4.2	BSB <sub>5</sub> - Value	mg/g n/f
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.
<b>13. Disposal Considerations</b>		
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). Waste regulation (EU): 2008/98/EC
13.2.2	Recommended Purifying Agent	-
<b>14. Transport Information</b>		
14.1	<b>UN-Number</b> DOT, ADR, ADN, IMDG, IATA	- Not a dangerous substance as defined in the above regulations.
14.2	<b>UN proper shipping name</b> DOT, ADR, ADN, IMDG, IATA	- Not classified as dangerous in the meaning of transport regulations.
14.3	<b>Transport hazard class(es)</b> DOT, ADR, ADN, IMDG, IATA	- Not classified as dangerous in the meaning of transport regulations.
14.4	<b>Packing group</b> DOT, ADR, IMDG, IATA	- Not classified as dangerous in the meaning of transport regulations.
14.5	<b>Special precautions for user</b>	Not applicable
14.6	<b>UN "Model Regulation"</b>	-
14.7	<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable
<b>15. Regulatory Information</b>		

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**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 Regulatory Components REACH This mixture contains no ingredient which is subject to an authorization according to Regulation (EC) No. 1907/2006 (REACH).
- 15.1.6 special Labelling No
- 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 hazard class (Germany) WGK 1: (slightly hazardous for water)
- 15.2.7 Other Provisions  
Poison-Class CH F (free)

**International Inventories****15.3**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Sodium chloride	231-598-3	-		X	X	-	X	X	X	X	X
Water	231-791-2	-		X	X	-	X	-	X	X	X

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

**16. Other Information** n/f = not found**16.1 Modified** change in wording MSDS to SDS

*Specifications made in this Safety 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.*