



## MATERIAL SAFETY DATA SHEET According to 91/155/EEC

**PRODUCT: SODIUM CHLORIDE (HYGITECH)**

Version: 27/01/2010

### 1 - IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Identification of the substance or the preparation:

**Product name:** Sodium Chloride 0,9% 500ml  
Sodium Chloride 0,9% 250ml

Identification of the supplier:

HYGITECH  
109 bis avenue Charles de Gaulle  
92200 Neuilly-sur-Seine  
**Telephone:** 01 48 01 32 89  
**Fax:** 01 48 01 32 80

### 2 - COMPOSITION / INFORMATIONS ON INGREDIENTS

Hazardous Ingredients	CAS#	Hazard identification & Risk Phrases
<b>R-Phrases</b>	CAS-No. 7647-14-5 EC-No. (EINECS/ELINCS) 231-598-3	Not applicable
<b>Special hazards information for humans and environment</b>		Not classified as a dangerous product according to the EC-guideline in the latest version.

### 3 - HAZARDS IDENTIFICATION

### 4 - FIRST AID MEASURES

<b>General Information</b>	Consult physician with continuous complaints. In case of inhalation
<b>In case of inhalation</b>	Ensure fresh air.
<b>In case of skin contact</b>	Rinse off with water
<b>In case of eye contact</b>	Rinse thoroughly with water. Alter swallowing Rinse mouth with water and drink plenty of water.

### 5 - FIRE-FIGHTING MEASURES

**Suitable extinguishing material** The product is not combustible.

**Extinguishing material that may not be used for safety reasons**  
None

**Special exposure hazards arising from the substance, combustion products or resulting gases**  
In the event of fire: Hydrogen chloride (HCl) can be set free.

**Special protective equipment for fire-fighters**  
In the event of fire and/or explosion do not breathe fumes.

**Additional information**  
Collect contaminated fire fighting water separately, may not be discharged into the drains.

### 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautionary measures** Avoid dust formation

<b>Environmental precautions</b>	Do not discharge into the drains or bodies of waters
<b>Methods for cleaning / picking up</b>	Avoid dust formation Disposal according to regulations Flush away residues with water Pick up mechanically and send for disposal
<b>Additional information</b>	Information for safe handling see Chapter 7. Information for personal protective equipment see -Chapter 8. Information for disposal see Chapter 13.

## 7- HANDLING AND STORAGE

<b><u>Advice on safe handling</u></b>	No special measures necessary if used correctly. Take the usual precautions when handling chemicals.
<b><u>Advice on protection against fire and explosion</u></b>	The product is not combustible. No special measures necessary.
<b><u>Requirements for storage rooms and vessels</u></b>	Refer to the National Regulations for Sodiumchloride (e.g. Germany: WGK 1, footnote 14).
<b><u>Advice on storage compatibility</u></b>	Do not store together with strong acids Do not store together with oxidizing agents.
<b><u>Further Information on storage conditions</u></b>	Store in a dry place.
<b><u>Storage Group 13 (German VCI-classification)</u></b>	
<b><u>Information on storage stability</u></b>	Unlimited stability.

## 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

<b><u>Additional advice on system design</u></b>	None
<b><u>Additional advice</u></b>	None
<b><u>Respiratory protection</u></b>	In case of dust formation wear micro dust mask.
<b><u>Hand protection</u></b>	Not required.
<b><u>Eye protection</u></b>	In case of dust formation wear goggles.
<b><u>Skin protection</u></b>	None
<b><u>General protective measures</u></b>	None
<b><u>Hygiene measures</u></b>	Do not eat or drink during work. Brush soiled clothing. After work wash thoroughly.

## 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b><u>Form</u></b>	<b><u>Colour</u></b>			<b><u>Odour</u></b>	
Liquid	Colourless			Odourless	
<b><u>Data relevant for safety</u></b>	<b><u>Value</u></b>	<b><u>Temperature</u></b>	<b><u>At</u></b>	<b><u>Method</u></b>	<b><u>Remark</u></b>
<b><u>pH-value in delivery state</u></b>	6 - 9	20 °C	9 g/l	DIN 38404-5	neutral

<u>Flammable solid</u>	No		
<u>Flammable gas</u>	No		
<u>Combustion temperature</u>	No		
<u>Autoignition</u>	No		
<u>Lower explosion limit</u>	No		
<u>Upper explosion limit</u>	No		
<u>Vapour pressure</u>	0 mbar	20 °C	
<u>Density</u>	2,1615 g/cm <sup>3</sup>	25 °C	1013 hPa
<u>Bulk density</u>	Vacuum silt: 1100 — 1300 kg/m <sup>3</sup>		
<u>Solubility in water</u>	359 g/l	20 °C	1013 hPa
<u>Partition coefficient</u>	Not determined		
<u>(log p<sub>OW</sub>)</u>			
<u>Viscosity 1</u>	Not applicable		

## 10 – STABILITY AND REACTIVITY

Conditions to avoid None

### Materials to avoid

Reactions with strong acids.  
Reactions with oxidizing agents.  
Corrosive to metals.

Hazardous decomposition products With strong acids: Hydrogen chloride (HCl) With oxidizing agents: chlorine gas (Cl<sub>2</sub>)

## 11 - TOXICOLOGICAL INFORMATION

Remark	Value	Validation	Species	Method
<u>LD50 acute oral</u>	3000 mg/kg		rat	
Ref.5				
<u>LD50 acute dermal</u>	not determined			
<u>LC50 acute inhalation</u>	not determined			
<u>Irritability skin</u>	slightly irritant		rabbit	
Ref.6				
<u>Irritability eye</u>	slightly irritant		rabbit	
Ref.6				
<u>Sensitization skin</u>	no			
Experiences				
<u>Sensitization respiratory system</u>	no			
Experiences				
<u>Toxicological test (Additional information)</u>				
No experimental indication of genotoxic effects. Substance has no mutagenic activity (Ames-Test)				
<u>Additional information</u>				
Toxicological data refer to pure product. Our data are not sufficient for total texture judgement. Follow the usual hygiene directives for handling with chemicals.				

## 12 – ECOLOGICAL INFORMATION

### Elimination (persistence and degradability)

Elimination rate	Method of analysis	Method	Remark
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Not applicable  
 Not applicable  
 Inorganic product, cannot be eliminated from water by biological purification process not applicable  
 Inorganic product, cannot be eliminated from water by biological purification process not applicable  
 Inorganic product, cannot be eliminated from water by biological purification process.

#### Ecotoxicological effects

	Value	Species	Method	Remark
<b>Fish</b>	LC50 7341 mg/l (96 h)		Carassius Auratus	Ref. (1)
<b>Daphnia</b>	EC50 4135 mg/l (48 h)		Daphnia magna	Ref. (2)
<b>Algae</b>	EC50 9000 mg/l (7 d)		Potamogeton	Ref. (3)
<b>Bacteria</b>	EC17 577 mg/l (5 d)		Paramecium tetraurelia	Ref. (4)
<b>Behaviour in sewage plant</b>				

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

#### Additional ecological information

	Value	Method	Remark
<b>AOX</b>	Not applicable		

#### General information

With intended application no ecological problems likely.

### 13 – DISPOSAL CONSIDERATIONS

<b>Waste code No.</b>	<b>Name of Waste</b>
06 03 14	Solid salts and solutions except those mentioned in 06 03 11 and 06 03 13.
<b>Recommendations for the product</b>	In accordance with regulations for special waste, discharge of alter pretreatment, to an authorized special waste disposal site.
<b>Recommendations for the packaging</b>	Uncontaminated packaging may be taken for recycling. Contaminated packaging should be emptied as far as possible and discharged like product.
<b>Recommended cleansing agent</b>	No

### 14 – TRANSPORT INFORMATION

#### Land and inland navigation transport (ADR/RID/GGVSE) Remarks

No hazardous material as defined by the regulations.

### 15 – REGULATORY INFORMATION

<b>Remarks for classification</b>	<b>No</b>
<b>R-phrases</b>	<b>No</b>
<b>S-phrases</b>	<b>No</b>
<b>National regulations</b>	



**Restriction of occupation**  
**Decree for case of interference**  
**Classification acc. to VbF**

**No**  
Not applicable  
VbF: is not subject to decree for combustible liquids.

**German TA Luft Remarks**

No

**Water hazard classification**

1

KBwS classification

## 16 - OTHER INFORMATION

**Training advice**

No

**Recommended uses and restrictions**

No

**Further information**

The information given is based on our present knowledge and is not meant to guarantee product properties. Recipients of our product must take responsibility for observing existing laws and regulations.  
Refer to product information.

All informations of this safety-data-sheet refer to pure substance.

**Sources of key data used**

Ref. (1): Adelman IR et al (1976) J. Fish. Res. Board Can., 33, 203-208  
Ref. (2): Biesinger, K.E. et al (1972) J. Fish. Res. Board Can., 29(12), 1691  
Ref. (3): Environmental Protection Agency, Water Quality Criteria Data Book: Effects of chemicals on aquatic life, Environmental Protection Agency, Water Quality Office, Washington, D.C., Vol.3, p128-130(1971)  
Ref. (4): Cronkite, D.L., Gustafson, Bauer, B.F., Role of protein synthesis and ninhydrin-positive substances in acclimation of PARAMECIUM TETRAURELLIA to high NaCl, J. Exp. Zool., No.233, p21-28 (1985)  
Ref. (5): (1971), Toxicology and Applied Pharmacology, 20, p.57 (1971)  
Ref. (6): EUCLID data sheet CAS-Nr. 7647-14-5

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