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[www.mt.com/pro](http://www.mt.com/pro)

## Safety Data Sheet

according 1907/2006/EC, article 31

### Electrolyte LiCl 1 mol/l in ethanol (9830)

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#### 1. Identification of the substance / preparation and the company / undertaking

<b>Use of the substance / preparation</b>	Electrolyte for pH electrodes.
<b>Chemical characterization</b>	Alcoholic solution.
<b>Product code</b>	30045628, 51319051, 51343183
<b>Supplier</b>	Mettler-Toledo AG Process Analytics Im Hackacker 15 CH-8902 Urdorf Switzerland Tel: +41-44-729 62 11 Fax: +41-44-729 66 36 Email: <a href="mailto:process.hotline@mt.com">process.hotline@mt.com</a>
<b>Emergency telephone number</b>	+41-44-251 51 51 (Tox Center)
<b>Revision date</b>	20.07.2012
<b>Number</b>	5

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#### 2. Hazards identification

Highly flammable.

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### 3. Composition / information on ingredients

<b>Hazardous components</b>	Ethanol, (>90 %), [F, R-11], CAS No. 64-17-5, EU No. 603-002-00-5, EINECS No. 200-578-6 Lithium chloride, (5 %), [Xn, R-22-36/38], CAS No. 7447-41-8, EINECS No. 231-212-3
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### 4. First aid measures

<b>Inhalation</b>	Move to fresh air.
<b>Skin contact</b>	Wash off with soap and water.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
<b>Ingestion</b>	Immediately give large quantities of water to drink. Consult a physician for severe cases.

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### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use dry chemical, CO <sub>2</sub> , water spray or alcohol foam.
<b>Extinguishing media which must not be used for safety reasons</b>	None.
<b>Specific hazards</b>	Solvents may produce excessive pressure under fire-conditions. Sealed containers may rupture and ignite.
<b>Special protective equipment for firefighters</b>	Standard procedure for chemical fires.

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### 6. Accidental release measures

<b>Personal precautions</b>	Remove all sources of ignition. Ensure adequate ventilation.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	Flush with water.

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## 7. Handling and storage

<b>Handling</b>	Keep away from open flames, hot surfaces and sources of ignition. Vapours may form explosive mixtures with air.
<b>Storage</b>	Keep containers tightly closed in a cool, well-ventilated place.

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## 8. Exposure control / personal protection

<b>Exposure limit(s)</b>	OEL value: 500 ppm (Ethanol) [Embryotoxic substance (group C): there is no reason to fear poisoning of the fetus as long as the exposure is below the OEL value]
<b>Engineering measures to reduce exposure</b>	Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday.
<b>Personal protection equipment: Respiratory protection</b>	In case of insufficient ventilation wear suitable respiratory equipment.
<b>Hand protection</b>	Gloves.
<b>Eye protection</b>	Safety glasses.
<b>Skin and body protection</b>	Long sleeved clothing.

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## 9. Physical and chemical properties

<b>Form</b>	Liquid.
<b>Colour</b>	Colourless. Clear.
<b>Odour</b>	Alcoholic.
<b>Physical and chemical properties</b>	pH: 7 Boiling point/range: ~80 °C Relative density: <1 g/ml Flash point <23 °C Water solubility: completely miscible

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## 10. Stability and reactivity

<b>Stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Vapours may form explosive mixture with air.
<b>Materials to avoid</b>	Strong oxidizers, alkali metals and alkaline earth metals may cause fires or explosions.

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## 11. Toxicological information

<b>Acute toxicity</b>	Ethanol: LC50/inhalation/1h/rat = 20000 ppm. LD50/oral/rat = 7060 mg/kg. LD50/oral/mouse = 3450 mg/kg.
<b>Local effects</b>	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
<b>Long term toxicity</b>	Chronic intensive skin contact may cause dermatitis.
<b>Sensitization</b>	None.

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## 12. Ecological information

<b>Ecotoxicity</b>	Wastewater from subsequent processing should be given appropriate treatment in line with local regulations. EC50/24h/daphnia = >10000 mg/l. LC50/48h/golden orfe = >10000 mg/l.
<b>Mobility</b>	No data is available on the product itself.
<b>Bioaccumulation</b>	Does not bioaccumulate.

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## 13. Disposal considerations

<b>Waste from residues / unused products</b>	Can be incinerated, when in compliance with local regulations. European Waste catalogue code (EWC-code): 14 06 03.
<b>Contaminated packaging</b>	Offer rinsed packaging material to local recycling facilities. Dispose of as unused product.

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## 14. Transport information

<b>ADR/RID</b>	Proper shipping name:	Ethanol solution
	UN No.:	1170
	Kemler code:	33
	Class:	3
	Packing group:	II
	ADR/RID-Labels:	3
<b>IMO</b>	Proper shipping name:	Ethanol solution
	UN No.:	1170
	Class:	3
	Packing group:	II
	IMO-Labels:	3
	EMS:	F-E, S-D
<b>IATA</b>	Proper shipping name:	Ethanol solution
	UN No.:	1170
	Class:	3
	Packing group:	II
	IATA-Labels:	3
	Packing instruction (passenger aircraft):	353 (5 L)
	Packing instruction (cargo aircraft):	364 (60 L)

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## 15. Regulatory information

<b>Regulatory information</b>	The product is classified and labelled in accordance with EC directives or respective national laws.
<b>Symbol(s)</b>	F - Highly flammable.
<b>R-phrase(s)</b>	R11: Highly flammable.
<b>S-phrase(s)</b>	S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition – No smoking. S33: Take precautionary measures against static discharges.

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## 16. Other information

**Recommended use**

For industrial application only.

**Text of R phrases mentioned  
in section 2**

R11: Highly flammable.  
R22: Harmful if swallowed.  
R36/38: Irritating to eyes and skin.

**End use**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. It is not to be considered a warranty or quality specification.

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