

**Safety data sheet
 as per 91/155/EEC**

Written on: **04.08.2006**
 Revised on: **10.09.2007**

SDS no. **007_E**
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**Trade Name:
 Soldering grease**

1 Materials/Preparation and company designation	
Production specifications:	<i>Soldering grease DIN EN 29454 Teil 1, 3.1.1.C</i>
Trade Name:	Typ-No. <i>LF 25</i> ordering no. <i>005 40 026 99</i> Typ-No. <i>WLS 100</i> ordering no. <i>005 40 092 99</i> Typ-No. <i>WLS 20-65</i> ordering no. <i>005 40 094 99</i>
Manufacturer/supplier:	<i>CooperTools GmbH, Carl-Benz-Str. 2, 74354 Besigheim Tel: +49 7143 580-0, Fax: +49 7143 580-108</i>
Information supplied by:	<i>Environmental Protection Department Tel.: +49 7143 580 101, Fax: +49 7143 580 183</i>
Emergency Phone:	<i>GIZ Mainz Tel.: +49 6131 - 19240</i>

2 Composition/component data						
Chemical characteristics:						
▪ Description: <i>With zinc chloride and ammonium chloride activated emulsion of mineral greases and water.</i>						
▪ Hazardous contents:						
CAS No.	Designation	%	Code letter	R paragraphs	EU No.	
<i>7646-85-7</i>	<i>Zinc chloride</i>	<i><5.0</i>	<i>C, N</i>	<i>22-34-50/53</i>	<i>231-592-0</i>	

3 Potential hazards	
Hazard designation:	<i>N = Dangerous for the environment</i>
Special hazards information for persons and environment:	<i>The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</i>
Classification system:	<i>The classification is according to the latest editions of the EU-lists, and extended by company and literature data.</i>

4 First aid measures	
General information:	<i>Remove contaminated clothing.</i>
After inhalation:	<i>Supply fresh air; consult doctor in case of complaints.</i>
After skin contact:	<i>Generally the product does not irritate the skin.</i>
After eye contact:	<i>Rinse for several minutes in flowing water with the eyelid wide open.</i>
After swallowing:	<i>If symptoms persist consult doctor.</i>

5 Fire-fighting measures	
Suitable extinguishing agent:	<i>Use fire extinguishing methods suitable to surrounding conditions.</i>
Unsuitable extinguishing agents for safety reasons:	<i>Do not use a direct jet of water.</i>
Special hazard resulting from the substance, its combustion products or resulting gases:	<i>Hydrogen chloride (HCl)</i>
Special protective equipment:	<i>No special measures required.</i>

6 Measures if inadvertently released	
Personal precautions:	<i>Not required.</i>
Environmental precautions:	<i>Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.</i>
Procedure for cleaning/gathering up:	<i>Pick up mechanically.</i>

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7 Handling and storage	
Handling	
▪ Information for safe handling:	<i>Ensure good ventilation/exhaustion at the workplace.</i>
▪ Information for fire and explosion protection:	<i>No special measures required.</i>
Storage	
▪ Requirements for store rooms and containers:	<i>No special requirements.</i>
▪ Storage with other substances:	<i>n.r.</i>
▪ Further details on storage conditions:	<i>n.r.</i>
▪ Storage class:	<i>n.r.</i>

8 Exposure limits and personal protective equipment				
Additional information for layout of technical equipment:		<i>No further data; see item 7.</i>		
Constituents with workplace-related limit values that have to be monitored:				
CAS No.	Substance designation	Type	Limit value	Unit
7646-85-7	<i>Zinc chloride</i>	<i>OES</i>	<i>Short-term value: 2 Long-term value: 1 fume</i>	<i>mg/m³ mg/m³</i>
Additional information:		<i>none</i>		
Personal protective equipment:		<i>n.a.</i>		
General protection and hygiene measures:		<i>Wash your hands before breaks and at the end of work.</i>		
▪ Breathing protection		<i>Not required.</i>		
▪ Hand protection		<i>The selection was derives with materials from the data of the glove manufacturers. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves Nitrile rubber, NBR Butyl rubber, BR The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Penetration time of glove material The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.</i>		
▪ Eye protection		<i>Not required.</i>		
▪ Body protection		<i>Protective work clothing.</i>		

9 Physical and chemical properties:			
Form:	<i>Pasty</i>		
Colour:	<i>Light yellow</i>		
Odour:	<i>characteristic</i>		
	Value/range	Unit	Method
Flashpoint:	<i>210</i>	<i>°C</i>	
Ignition point	<i>n.c.</i>	<i>°C</i>	
Viscosity:	<i>n.c.</i>		
Density at 20 °C:	<i>1</i>	<i>g/cm³</i>	
Lower Ex-limit:	<i>n.a.</i>	<i>Vol %</i>	
Upper Ex-limit:	<i>n.a.</i>	<i>Vol %</i>	
Solubility in water at 20 °C:	<i>Insoluble</i>	<i>g/l</i>	
Change of state:	<i>n.a.</i>		
Melting point:	<i>55</i>	<i>°C</i>	

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Boiling point/range:	<i>n.c.</i>		
Solvent content:	<i>0.0</i>	%	
Bulk density:	<i>n.c.</i>		
Vapour pressure at 20 °C:	<i>n.c.</i>	<i>mbar</i>	
pH-value at 20 °C:	<i>6</i>		

10 Stability and reactivity	
Thermal decomposition conditions to be avoided:	<i>n.a.</i>
Hazardous reactions:	<i>No dangerous reactions known.</i>
Hazardous decomposition products:	<i>Hydrogen chloride (HCl) Ammonia</i>

11 Toxicology data	
Acute toxicity:	<i>LD/LC50 values relevant for classification: 7646-85-7 Zinc chloride: Oral LD50 350 mg/kg (rat)</i>
Primary irritant effects:	
▪ On the skin:	<i>No irritant effect.</i>
▪ On the eye:	<i>No irritating effect.</i>
▪ Sensory effects	<i>No sensitizing effects known.</i>
▪ Additional toxicological information:	<i>n.a.</i>

12 Ecological information	
Ecotoxicological effects:	<i>Toxic for fish.</i>
General information:	<i>Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms.</i>

13 Notes on disposal	
Product:	
▪ Recommendation:	<i>Use. Must not be disposed of in the household waste. Never permit release to sewage system.</i>
Waste reference number:	<i>Recommendation AVV code : 06 03 13</i>
Waste name: / Group:	<i>solid salts and solutions containing heavy metals</i>
Uncleaned packaging:	
▪ Recommendation:	<i>Disposal must be made according to official regulations.</i>
▪ Disposal route:	<i>n.c.</i>

14 Transport data	
Land transport ADR/RID and GGVE (internal/international)	
▪ ADR/RID-GGVS/E Class:	<i>9 / PG III (Miscellaneous dangerous substances and articles)</i>
▪ Classification code:	<i>M7</i>
▪ Kemler number:	<i>90</i>
▪ UN number:	<i>3077</i>
▪ Designation of goods:	<i>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc chloride)</i>
Ocean transport IMDG/GGVSea	
▪ IMDG/GGVSea Class:	<i>9</i>
▪ UN number:	<i>3077</i>
▪ Packaging group:	<i>III</i>
▪ EMS number:	<i>F-A, S-F</i>
▪ MFAG:	<i>n.c.</i>
▪ Marine pollutant:	<i>No</i>
▪ Correct technical name:	<i>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE)</i>

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Air transport ICAO-TI and IATA-DGR	
▪ ICAO/IATA Class:	9
▪ UN/ID number:	3077
▪ Packaging group:	III
▪ Correct technical name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE)

15	Instructions	
	▪ Identification to EC directives:	<i>This product is classified and marked in accordance with EC directives/Hazardous Goods Ordinance.</i>
	▪ Identification letter and hazard designation of product:	<i>N = Dangerous for the environment</i>
	▪ Hazard components for labelling:	
	▪ R paragraphs:	<i>51/53 = Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</i>
	▪ S paragraphs:	<i>29/56 = Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. 57 = Use appropriate container to avoid environmental contamination. 60 = This material and its container must be disposed of as hazardous waste.</i>
	▪ Special identification special preparations:	<i>n.r.</i>
	National regulations	
	▪ Occupational restrictions	
	▪ Hazardous Incident Ordinance:	<i>n.a.</i>
	▪ Technical atmospheric instructions:	
	▪ Water pollution class:	<i>1</i>

16	Other information	
		Relevant R-phrases <i>22 = Harmful if swallowed. 34 = Causes burns. 50/53 = Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</i>

**The specifications are based on the present-day status of our knowledge,
 but do not represent any assurance of product properties and are not a basis for any contractual
 legal relationship.**

**Department issuing data sheet: Environmental Protection Department
 Contact person: V. Heller**

n.a.	= not applicable
n.c.	= not determined
n.r.	= not required