



STANNOL

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Trade name or designation of the mixture	Löt draht 2630/2632/HS10/HS05/362 ECOLOY® TSC
REACH Registration Number	-
Synonyms	Lötzinn ECOLOY® TSC (Sn, Cu 0,5-0,9%, Ag 3,6-4,0%) * Lötzinn ECOLOY® TSC 263 (Sn, Cu 0,2-0,4%, Ag 2,4-2,8%) * Lötzinn ECOLOY® TSC 305 (Sn, Cu 0,3-0,7%, Ag 2,8-3,2%) * Lötzinn ECOLOY® TSC 0307 (Sn, Cu 0,5-0,9%, Ag 0,2-0,4%) * Lötzinn ECOLOY® TSC 355 (Sn, Cu 0,4-0,6%, Ag 3,3-3,7%) * Lötzinn ECOLOY® TSC 305 B (Sn, Cu 0,35-0,45%, Ag 2,75-2,85%)
Issue date	20-November-2012
Version number	1.0
Revision date	20-November-2012
Supersedes date	20-November-2012
Product use	professional use

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Wire for soft solder
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### 1.3. Details of the supplier of the safety data sheet

Company name	STANNOL GmbH
Address	Oskarstr. 3-7 42283 Wuppertal Germany
Contact person	Dr. Sven Mönninghoff
Telephone number	+49 (0) 202 585-129
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e-mail	sven.moeninghoff@stannol.de
Contact person	Hans-Gerhard Rohe
e-mail	hans-gerhard.rohe@bayer.com
Telephone number	+49 (0) 175 30 72485
Emergency telephone number	+49 (0) 202 585 129 (8:00 a.m. – 4:00 p.m. (MET))

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Remark: The classification for this article has been derived with the use of the regulations for mixtures.

#### Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	May cause sensitisation by skin contact.
Main symptoms	Not available.

### 2.2. Label elements

#### Label according to Directive 67/548/EEC or 1999/45/EC as amended

EC number	-
EC label	Not available.
R-phrases	Not available.
S-phrases	Not available.
Authorisation number	Not available.

Supplemental label information Not applicable.

## 2.3. Other hazards

Remark: As an article, this product has not to be labelled pursuant to current EU-regulation.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Zinn	<= 99	7440-31-5 231-141-8	-	-	#
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Silver (metal, >1mm)	<= 4	7440-22-4 231-131-3	-	-	#
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Rosin	<= 3.8	8050-09-7 232-475-7	-	650-015-00-7	
<b>Classification:</b>					
<b>DSD:</b>	R43				
<b>CLP:</b>	Skin Sens. 1;H317				
Copper Metal	<= 1	7440-50-8 231-159-6	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

#: This substance has been assigned Community workplace exposure limit(s).

## SECTION 4: First aid measures

**General information** Not available.

### 4.1. Description of first aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Rinse skin with water/shower. Get medical attention if irritation develops and persists. For hot product: Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.
<b>Eye contact</b>	Remove contact lenses, if present and easy to do. Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical advice/attention if you feel unwell.

**4.2. Most important symptoms and effects, both acute and delayed** Not available.

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**General fire hazards** Not available.

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Water, CO2 or Foam

**5.2. Special hazards arising from the substance or mixture** The product itself does not burn. Hot melt

### 5.3. Advice for firefighters

<b>Special protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Special fire fighting procedures</b>	Water runoff can cause environmental damage.

## **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up.
<b>For emergency responders</b>	Not available.

**6.2. Environmental precautions** Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Remove material, as much as possible, using mechanical equipment. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. For waste disposal, see section 13.

**6.4. Reference to other sections** For personal protection, see section 8. For waste disposal, see section 13.

## **SECTION 7: Handling and storage**

**7.1. Precautions for safe handling** Use only with adequate ventilation. Avoid inhalation of vapours and aerosol spray. Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Avoid release to the environment. Use care in handling/storage.

**7.2. Conditions for safe storage, including any incompatibilities** Store in a dry place. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

**7.3. Specific end use(s)** Not available.

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### Occupational exposure limits

##### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Copper Metal (7440-50-8)	STEL	2 mg/m <sup>3</sup>	Inhalable dusts and mists.
	TWA	1 mg/m <sup>3</sup>	Inhalable dusts and mists.
		0.2 mg/m <sup>3</sup>	Fume.
Rosin (8050-09-7)	STEL	0.15 mg/m <sup>3</sup>	Fume.
	TWA	0.05 mg/m <sup>3</sup>	Fume.
	TWA	0.1 mg/m <sup>3</sup>	
Silver (metal, >1mm) (7440-22-4)	TWA	0.1 mg/m <sup>3</sup>	

##### EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Silver (metal, >1mm) (7440-22-4)	TWA	0.1 mg/m <sup>3</sup>
Zinn (7440-31-5)	TWA	2 mg/m <sup>3</sup>

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

### 8.2. Exposure controls

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide adequate general and local exhaust ventilation.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Chemical goggles are recommended.

#### **Skin protection**

- **Hand protection** Use protective gloves made of: Leather

- **Other** Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

<b>Thermal hazards</b>	Thermally protective gloves are recommended. If contact with forearms is likely, wear gauntlet-style gloves. Avoid contact with molten material.
<b>Hygiene measures</b>	Avoid contact with skin. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practices. Avoid contact with eyes.
<b>Environmental exposure controls</b>	Not available.

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

#### **Appearance**

<b>Physical state</b>	Solid.
<b>Form</b>	Roll.
<b>Colour</b>	Metallic.
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	217 - 227 °C (422.6 - 440.6 °F)
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	Not available.

### **9.2. Other information**

<b>Density</b>	7.00 - 9.00 g/ml @ 20 °C
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## **SECTION 10: Stability and reactivity**

<b>10.1. Reactivity</b>	Strong oxidizing agents.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	None under normal conditions.
<b>10.5. Incompatible materials</b>	Acids. Chlorine.
<b>10.6. Hazardous decomposition products</b>	Not available.

## **SECTION 11: Toxicological information**

<b>General information</b>	Not available.
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#### **Information on likely routes of exposure**

<b>Ingestion</b>	Not available.
<b>Inhalation</b>	Not available.
<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.

**Symptoms** Not available.

### 11.1. Information on toxicological effects

Components	Species	Test results
Copper Metal (7440-50-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg, OECD Guideline 402
<i>Oral</i>		
LD50	Rat	> 2500 mg/kg, OECD Guideline 401
Silver (metal, >1mm) (7440-22-4)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
<b>Skin corrosion/irritation</b>	Not available.	
<b>Serious eye damage/irritation</b>	Not available.	
<b>Respiratory sensitisation</b>	Not available.	
<b>Skin sensitisation</b>	Not available.	
<b>Germ cell mutagenicity</b>	Not available.	
<b>Carcinogenicity</b>	Not available.	
<b>Reproductive toxicity</b>	Not available.	
<b>Specific target organ toxicity - single exposure</b>	Not available.	
<b>Specific target organ toxicity - repeated exposure</b>	Not available.	
<b>Aspiration hazard</b>	Not available.	
<b>Mixture versus substance information</b>	Not available.	
<b>Other information</b>	Not available.	

## **SECTION 12: Ecological information**

**12.1. Toxicity** Not expected to be harmful to aquatic organisms. Avoid discharge into drains, water courses or onto the ground.

Components	Species	Test results
Rosin (8050-09-7)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> ) 911 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) > 1000 mg/l, 96 hours
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of this product.	
<b>12.3. Bioaccumulative potential</b>	Not available.	
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.	
<b>Bioconcentration factor (BCF)</b>	Not available.	
<b>12.4. Mobility in soil</b>	Not available.	
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.	
<b>12.6. Other adverse effects</b>	Not available.	

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

**Residual waste** Dispose of in accordance with local regulations.  
**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

## **SECTION 14: Transport information**

### **ADR**

Not regulated as dangerous goods.

### **IATA**

Not regulated as dangerous goods.

### **IMDG**

Not regulated as dangerous goods.

## **SECTION 15: Regulatory information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

#### **EU regulations**

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA**

Not listed.

#### **Authorisations**

**Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation**

Not listed.

#### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

Not regulated.

#### **Other EU regulations**

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not regulated.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Rosin (CAS 8050-09-7)

**Directive 94/33/EC on the protection of young people at work**

Rosin (CAS 8050-09-7)

#### **Other regulations**

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product does not need to be labelled in accordance with EC directives or respective national laws.

#### **National regulations**

Not available.

#### **15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

## **SECTION 16: Other information**

<b>List of abbreviations</b>	Not available.
<b>References</b>	Not available.
<b>Information on evaluation method leading to the classification of mixture</b>	Not available.
<b>Full text of any statements or R-phrases and H-statements under Sections 2 to 15</b>	R43 May cause sensitisation by skin contact.  H317 - May cause an allergic skin reaction.
<b>Revision information</b>	Physical & Chemical Properties: Multiple Properties
<b>Training information</b>	Not available.
<b>Disclaimer</b>	The information in the sheet was written based on the best knowledge and experience currently available.