

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	Lötdraht Kristall 502 / 505 / 511 ECOLOY® TC
REACH Registration Number	-
Synonyms	Lötzinn ECOLOY® TC (Sn, Cu 0,5-0,9%) * Lötzinn ECOLOY® TC 300 (Sn, Cu 2,5-3,5%)
Issue date	26-November-2012
Version number	1.0
Revision date	26-November-2012
Product use	professional use
1.2. Relevant identified uses of t	he substance or mixture and uses advised against
Identified uses	Metal alloy for soft solder
1.3. Details of the supplier of the	e safety data sheet
Company name	STANNOL GmbH
Address	Oskarstr. 3-7
	42283 Wuppertal
Contract marray	Germany
Contact person Telephone number	Dr. Sven Mönninghoff +49 (0) 202 585-129
Fax	+49 (0) 202 585 155
e-mail	sven.moenninghoff@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

This preparation does not meet the criteria for classification according to Directive 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	Not available.
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		96.5 - 99.5	7440-31-5 231-141-8	-	-	#
Classification: DSD: - CLP: -	-	201 111 0				
	-					
Copper Metal		0.5 - 3.5	7440-50-8 231-159-6	-	-	
Classification: DSD: - CLP: -	-					
	CLP:	-				

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 meas	sures
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	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.
Eye contact	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.
Ingestion	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	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	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	
Special protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Special fire fighting procedures	Water runoff can cause environmental damage.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up.			
For emergency responders	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

Components	Туре	Value	Form
Copper Metal (7440-50-8)	STEL	2 mg/m3	Inhalable dusts and mists.
	TWA	1 mg/m3	Inhalable dusts and mists.
		0.2 mg/m3	Fume.

Components Type Value

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Zinn (7440-31-5)	TWA	2 mg/m3		
Biological limit values	No biological exposure limits noted for the ingredient(s).			
Recommended monitoring procedures	Follow standard monitoring procedu	res.		
8.2. Exposure controls				
Appropriate engineering controls	should be matched to conditions. If or other engineering controls to mai	0 air changes per hour) should be used. Ventilation rates applicable, use process enclosures, local exhaust ventilation, ntain airborne levels below recommended exposure limits. If plished, maintain airborne levels to an acceptable level. exhaust ventilation.		
Individual protection measures	, such as personal protective equip	nent		
Eye/face protection	Chemical goggles are recommende	d.		
Skin protection				
- Hand protection	Use protective gloves made of: Leat	ther		
- Other		IId be chosen according to the CEN standards and in ersonal protective equipment. Normal work clothing (long commended.		
Respiratory protection	When workers are facing concentra certified respirators.	tions above the exposure limit they must use appropriate		
Thermal hazards	Thermally protective gloves are record gauntlet-style gloves. Avoid contact	ommended. If contact with forearms is likely, wear with molten material.		
Hygiene measures	Avoid contact with skin. When using industrial hygiene and safety practic	, do not eat, drink or smoke. Handle in accordance with good es. Avoid contact with eyes.		
Environmental exposure controls	Not available.			

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
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Physical state	Solid.
Form	Roll.
Colour	Metallic.
Odour	Odourless.
Odour threshold	Not available.
рН	Not applicable.
Melting point/freezing point	227 - 310 °C (440.6 - 590 °F)

Not available.
Not applicable.
Not applicable.
Not applicable.
losive limits
Not available.
Not available.
Not applicable.
Not applicable.
Not available.
insoluble
Not available.
Not available.
Not applicable.
Not available.
Not available.
7.00 - 9.00 g/ml @ 20

SECTION 10: Stability and reactivity

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

°C

SECTION 11: Toxicological information

General information	Not available.	
Information on likely routes of exposure		
Ingestion	Not available.	
Inhalation	Not available.	
Skin contact	Not available.	
Eye contact	Not available.	
Symptoms	Not available.	

11.1. Information on toxicological effects

Components	Species	Test results
Copper Metal (7440-50-8)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, OECD Guideline 402
Oral		
LD50	Rat	> 2500 mg/kg, OECD Guideline 401
Skin corrosion/irritation	Not available.	
Serious eye damage/irritation	Not available.	
Respiratory sensitisation	Not available.	
Skin sensitisation	Not available.	
Germ cell mutagenicity	Not available.	
Carcinogenicity	Not available.	

Reproductive toxicity	Not available.	
Specific target organ toxicity - single exposure	Not available.	
Specific target organ toxicity - repeated exposure	Not available.	
Aspiration hazard	Not available.	
Mixture versus substance information	Not available.	
Other information	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.	
12.2. Persistence and degradability	No data is available on the degradability of this product.	
12.3. Bioaccumulative potential	Not available.	
Partition coefficient n-octanol/water (log Kow)	Not available.	
Bioconcentration factor (BCF)	Not available.	
12.4. Mobility in soil	Not available.	
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.	
12.6. Other adverse effects	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.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

ΙΑΤΑ

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. 190 Not listed.	07/2006, REACH Article 59(1) Candidate List as currently published by ECHA
Authorisations	
Regulation (EC) No. 143 Not listed.	3/2011 Annex XIV Substances Subject to Authorisation
Restrictions on use	
Regulation (EC) No. 190	07/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed. Directive 2004/37/EC: o work	n the protection of workers from the risks related to exposure to carcinogens and mutagens at
Not regulated. Directive 92/85/EEC: on breastfeeding	the safety and health of pregnant workers and workers who have recently given birth or are
Not regulated.	
Other EU regulations	
Directive 96/82/EC (Sev	eso II) on the control of major-accident hazards involving dangerous substances
Not regulated. Directive 98/24/EC on th	ne protection of the health and safety of workers from the risks related to chemical agents at work
	ne protection of young people at work
Not regulated.	
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.
CECTION 10. Other inf	e vez etie z

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Full text of any statements or R-phrases and H-statements under Sections 2 to 15	None.
Revision information	Composition/Information on Ingredients: Disclosure Overrides Physical & Chemical Properties: Multiple Properties
Training information	Not available.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.