according to Regulation (EC) No. 1907/2006



STANDART Lac K 900 Copper Powder

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

1.1 Product identifier		
Trade name	:	STANDART Lac K 900 Copper Powder
Product code	:	063271VZ0M1
Substance name	:	copper flakes (coated with aliphatic acid)
Index-No.	:	029-019-01-X

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

Use of the	:	Colouring agents, pigments
Substance/Mixture		

1.3 Details of the supplier of the safety data sheet

Company	:	ECKART GmbH Guentersthal 4 91235 Hartenstein
Telephone	:	+499152770
Telefax	:	+499152777008
E-mail address of person responsible for the SDS	:	msds.eckart@altana.com

1.4 Emergency telephone number

NCEC: +44 1235 239670 (Europe) Call and response in your language is possible. Contract no.: ECKART29003-NCEC.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)				
Acute toxicity, Category 4	H302: Harmful if swallowed.			
Acute toxicity, Category 3	H331: Toxic if inhaled.			
Eye irritation, Category 2	H319: Causes serious eye irritation.			
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.			

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Long-term (chronic) aquatic hazard, Category 1			d, H410: effects	Very toxic to aquatic life with long lasting
2.2 Label	elements			
	I ling (REGULATION (B rd pictograms	EC) No : 〈	o 1272/2008)	
Signa	l word	: D	Danger	
Hazaı	rd statements	H H	1302 1319 1331 1410	Harmful if swallowed. Causes serious eye irritation. Toxic if inhaled. Very toxic to aquatic life with long lasting effects.
Preca	utionary statements	: P P P P R S	Prevention: 2261 2264 2273 2280 Response: 2391 Storage: 2403 + P233	Avoid breathing dust. Wash skin thoroughly after handling. Avoid release to the environment. Wear eye protection/ face protection. Collect spillage. Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

Combustible Solids

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	:	copper flakes (coated with aliphatic acid)
Index-No.	:	029-019-01-X

Components

Chemical name	CAS-No.	Concentration (%	M-Factor, SCL, ATE
	EC-No.Index-No.	w/w)	

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	er flakes (coated with tic acid)	Registration number Not Assigned 029-019-01-X 01-2119480154-42	>= 50 - <= 100	M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10 Acute toxicity estimate Acute oral toxicity: 500 mg/kg Acute inhalation toxicity (dust/mist): 0.733 mg/l

SECTION 4: First aid measures

4.1 Description of first aid measured	ure	S
General advice	:	Move the victim to fresh air.
		Move out of dangerous area. Show this safety data sheet to the doctor in attendance.
If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	Wash off immediately with soap and plenty of water.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
4.2 Most important symptoms ar	nd e	effects, both acute and delayed
Risks	:	Harmful if swallowed. Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Toxic if inhaled.

This information is not available.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Special powder against metal fire Dry sand ABC powder
Unsuitable extinguishing media	:	Water High volume water jet Carbon dioxide (CO2)

5.2 Special hazards arising from the substance or mixture

Specific hazards during	:	Do not allow run-off from fire fighting to enter drains or water
firefighting		courses.

5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.
Further information	:	Standard procedure for chemical fires.
		Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective	e equipment and emergency procedures
Personal precautions :	Use personal protective equipment. Evacuate personnel to safe areas. Use personal protective equipment. Avoid dust formation. Avoid breathing dust.
6.2 Environmental precautions	
Environmental precautions :	The product should not be allowed to enter drains, water courses or the soil.
	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

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6.3 Methods and material for containment and cleaning up Methods for cleaning up : Use mechanical handling equipment.				
		Pick up and t	ransfer to properly labelled containers.	
		Keep in suital	ble, closed containers for disposal.	
For persor	6.4 Reference to other sections For personal protection see section 8.			
SECTION	N 7: Handling and st	orage		
	utions for safe handlin e on safe handling	: Avoid creating Routine hous	g dust. ekeeping should be instituted to ensure that accumulate on surfaces.	
		Do not breath Avoid contact For personal Smoking, eat application ar	on of respirable particles. ne vapours/dust. t with skin and eyes. protection see section 8. ing and drinking should be prohibited in the rea. nse water in accordance with local and national	
	e on protection against nd explosion	: Normal meas	ures for preventive fire protection.	
		Avoid dust for	rmation.	
Hygie	ene measures	hands before	strial hygiene practice. Do not smoke. Wash breaks and at the end of workday. Keep away d drink. Keep away from tobacco products.	
			to not eat or drink. When using do not smoke. before breaks and at the end of workday.	
7.2 Condi	tions for safe storage	, including any inc	ompatibilities	
	irements for storage and containers		allations / working materials must comply with gical safety standards.	
		store near co closed in a co	rom sources of ignition - No smoking. Do not mbustible materials. Keep containers tightly bol, well-ventilated place. To maintain product ot store in heat or direct sunlight.	
			er tightly closed in a dry and well-ventilated cal installations / working materials must comply	

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			with the technolog	gical safety standards.
	er information on le conditions	:	Protect from hum	idity and water.
Advice	e on common storage	strongly acid mat		oxidizing agents, strongly alkaline and erials in order to avoid exothermic reactions. ther with oxidizing and self-igniting products.
Damp	ness	:	: Keep in a dry, cool and well-ventilated place.	
	er information on le stability	: Keep in a dry place. No decomposition if stored and applied as directed		

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
copper flakes (coated with aliphatic acid)	7440-50-8	TWA (Fumes)	0.2 mg/m3 (Copper)	GB EH40
		TWA (Dusts and mists)	1 mg/m3 (Copper)	GB EH40
		STEL (Dusts and mists)	2 mg/m3 (Copper)	GB EH40

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
copper flakes (coated with aliphatic acid)	Workers	Inhalation	Acute systemic effects	9 mg/m3
	Workers	Skin contact	Long-term systemic effects	137 mg/kg
	Workers	Skin contact	Acute systemic effects	273 mg/kg
	Consumers	Inhalation	Long-term local effects	1 mg/m3
	Consumers	Inhalation	Acute local effects	1 mg/m3
	Consumers	Skin contact	Long-term systemic effects	137 mg/kg
	Consumers	Skin contact	Acute systemic effects	273 mg/kg
	Consumers	Ingestion	Long-term systemic effects	0.041 mg/kg

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Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
copper flakes (coated with	Fresh water	0.0078 mg/l
aliphatic acid)		
	Marine water	0.0052 mg/l
	STP	0.230 mg/l
	Fresh water sediment	87 mg/kg
	Marine sediment	676 mg/kg
	Soil	65 mg/kg

8.2 Exposure controls

Personal protective equipment	t
Eye/face protection :	Safety glasses
	Wear face-shield and protective suit for abnormal processing problems.
Hand protection Material :	Leather
Remarks :	Leather gloves The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed. Recommended preventive skin protection The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Skin and body protection :	Long sleeved clothing Safety shoes
	Dust impervious protective suit Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection :	Use suitable breathing protection if workplace concentration requires. Respirator with a dust filter P1 filter

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: powder	
Colour	: copper	

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Odour		:	odourless	
Odour	Threshold	:	No data available	9
Freezin	ng point	:	No data available	9
Boiling	point/boiling range	:	No data available	9
Flamma	ability	:	Combustible Soli	ds
	explosion limit / Upper bility limit	:	No data available	2
	explosion limit / Lower bility limit	:	No data available	9
Flash p	oint	:	No data available	9
Auto-ig	nition temperature	:	Not relevant	
Decom	position temperature	:	No data available	2
рН		:	substance/mixtu	re is non-soluble (in water)
Visc	cosity, kinematic	:	No data available	9
Solubili Wat	ty(ies) er solubility	:	immiscible	
Solu	ubility in other solvents	:	No data available	9
Partitio octanol	n coefficient: n- /water	:	No data available	9
Vapour	pressure	:	No data available	9
Relative	e density	:	No data available	9
Density	,	:	No data available	9
Relativ	e vapour density	:	No data available	9

9.2 Other information

No data available

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SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions

Stable under recommended storage conditions.
 No hazards to be specially mentioned.
 No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : No data available

No data available

10.5 Incompatible materials

10.6 Hazardous decomposition products

This information is not available.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Harmful if swallowed. Toxic if inhaled.	
Product:	
Acute oral toxicity	: Acute toxicity estimate: 506.59 mg/kg Method: Calculation method
Acute inhalation toxicity	 Acute toxicity estimate: 0.7092 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
Components:	
copper flakes (coated with	aliphatic acid):

Acute oral toxicity	:	LD50 Oral (Rat, male and female): 300 - 500 mg/kg Method: OECD Test Guideline 423
		Assessment: The component/mixture is moderately toxic after single ingestion.

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				stimate: 500 mg/kg oxicity estimate according to Regulation (EC)
Acute	Acute inhalation toxicity		Acute toxicity estimate: 0.733 mg/l Test atmosphere: dust/mist Method: Acute toxicity estimate according to Regulatio No. 1272/2008	
			LC50 (Rat, male Exposure time: Test atmospher Method: OECD	4 h
Acute	e dermal toxicity	:	Method: OECD	e and female): > 2,000 mg/kg Test Guideline 402 ne substance or mixture has no acute dermal
Skin	corrosion/irritation			
	classified based on avail	lable	information.	
Prod	luct:			
Rem	arks	:	May cause skin	irritation in susceptible persons.
Serio	ous eye damage/eye ir	ritat	ion	
	ses serious eye irritation			
Prod	luct:			
Rem	arks	:	Eye irritation	
<u>Com</u>	ponents:			
copp	per flakes (coated with	alip	hatic acid):	
Resu	ılt	:	Eye irritation	
Resp	biratory or skin sensiti	satio	on	
Skin	sensitisation			
Not c	classified based on avai	lable	information.	
-	biratory sensitisation classified based on avai	lable	information.	
Gern	n cell mutagenicity			
Not c	classified based on avail	lable	information.	
	inogenicity			
Not c	lassified based on avail	lable	information.	

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Rej	productive toxicity		
Not	classified based on availa	ble information.	
	OT - single exposure		
_	classified based on availa	able information.	
	OT - repeated exposure classified based on availa	able information.	
-	piration toxicity classified based on availa	ble information.	
11.2 Inf	ormation on other hazard	ds	
Fu	ther information		
	o <mark>duct:</mark> narks	: No data availa	ble
SECTIO	DN 12: Ecological info	rmation	
12.1 To	kicity		
Co	mponents:		
cop	oper flakes (coated with a	aliphatic acid):	
	Factor (Short-term (acute) atic hazard)	: 10	
	Factor (Long-term ronic) aquatic hazard)	: 10	
Eco	otoxicology Assessment		
Acu	ite aquatic toxicity	: Very toxic to a	quatic life.
Chi	onic aquatic toxicity	: Very toxic to a	quatic life with long lasting effects.
	rsistence and degradabil data available	ity	
	accumulative potential data available		
	bility in soil data available		
	sults of PBT and vPvB as	ssessment	
Pro	duct:		
	sessment		e/mixture contains no components considered rsistent, bioaccumulative and toxic (PBT), or



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			very persistent 0.1% or higher.	and very bioaccumulative (vPvB) at levels of	
	ocrine disrupting prope ata available	ertie	S		
12.7 Othe	r adverse effects				
Product: Additional ecological : An environmental hazard cannot be exclude unprofessional handling or disposal. Very toxic to aquatic life with long lasting eff					
SECTION	N 13: Disposal consid	dera	ations		
	bean Waste Catalogue bean Waste Catalogue	:	12 01 04 - non-ferrous metal dust and particles 10 03 21 - other particulates and dust (including ball-mill du containing hazardous substances		
13.1 Wast	te treatment methods				
courses or the soil. Do not contaminate pond chemical or used contain Send to a licensed waste		nate ponds, waterways or ditches with			
Conta	Contaminated packaging		Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. In accordance with local and national regulations.		
SECTION	N 14: Transport infor	mat	ion		
14.1 UN n	umber or ID number				
ADR		:	: UN 3077		
IMDO	6	:	UN 3077		
ΙΑΤΑ		: UN 3077			
14.2 UN p	roper shipping name				

 ADR
 : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper metal powder)

 IMDG
 : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

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				N.O.S. (Copper metal po	owder)		
I	ΙΑΤΑ		:		Environmentally hazardous substance, solid, n.o.s. (Copper metal powder)		
14.3	Transp	oort hazard class(es)					
				Class	Subsidiary risks		
	ADR		:	9			
I	IMDG		:	9			
I	ΙΑΤΑ		:	9			
14.4	Packin	ig group					
	Classifi Hazard Labels Tunnel IMDG			III M7 90 9 (-) III 9 F-A, S-F IMDG Code segn salts	egation group 7 - Heavy metals and their		
;	aircraft Packing	g instruction (cargo) g instruction (LQ) g group	:	956 Y956 III 9			
	IATA (I Packing (passei Packing	Passenger) g instruction nger aircraft) g instruction (LQ) g group	:	956 Y956 III 9			
		nmental hazards					
	ADR						
		nmentally hazardous	:	yes			
	IMDG Marine	pollutant	:	yes			
		Il precautions for use	r				
l	Remarl	ks	:	For single packa	gings <=5L / 5 kg, or combination		

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packagings containing inner packagings <= 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of other abbreviations

GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -



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Concentration associated with x% growth rate response: GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory: TRGS - Technical Rule for Hazardous Substances: TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GB / EN