according to (EC) No. 1907/2006



Trade name: VD90.5101 / VD90.5103 / VD90.5104 / VD90.5105 / VD90.5106 / VD90.5107 / VD90.5108/

VD90.5109 / VD90.5110 / VD90.5115 MARTIN Lotkugeln bleifrei

Issue: May 2021

SECTION 1: Identification of the product and of the company/undertaking

The material is defined as a manufactured substance as defined by the EU Regulation No. 1907/2006 (REACH-Regulation).

There is no legal requirement to produce a safety data sheet.

We therefore wish to advise that this information sheet is a voluntary one

not subject to the formal requirements of the REACH regulation.

1.1. Product identifier

SnAg3Cu0,5

1.2. Relevant identified uses of the product and uses advised against

1.3. Details of the supplier of the information data sheett

Company name: Martin GmbH
Street: Industriestr. 17
Telephone: +49 (0)89 894 18980
e-mail: info@martin-smt.de
Internet: www.martin-smt.de

1.4. Emergency telephone

number:

Please contact the nearest poison emergency center.

SECTION 2: Hazards identification

2.1. Classification of the product

Regulation (EC) No. 1272/2008

Hazard categories:

Hazardous to the aquatic environment: Aquatic Chronic 3

2.2. Label elements

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification		•		
7440-31-5	tin				
	231-141-8				
7440-22-4	silver		3,0 %		
	231-131-3		01-2119555669-21		
				0.5 %	
7440-50-8	copper				
	231-159-6		01-2119480154-42		
	Flam. Sol. 1, Aquatic Acute 1, Aquatic Chronic 1; H228 H400 H410				

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

according to (EC) No. 1907/2006



Trade name: VD90.5101 / VD90.5103 / VD90.5104 / VD90.5105 / VD90.5106 / VD90.5107 / VD90.5108/

VD90.5109 / VD90.5110 / VD90.5115 MARTIN Lotkugeln bleifrei

Issue: May 2021

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Do not breathe dust.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Welding and soldering products

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

according to (EC) No. 1907/2006



Trade name: VD90.5101 / VD90.5103 / VD90.5104 / VD90.5105 / VD90.5106 / VD90.5107 / VD90.5108/

VD90.5109 / VD90.5110 / VD90.5115 MARTIN Lotkugeln bleifrei

Issue: May 2021

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7440-50-8	Copper, dusts and mists (as Cu)	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
7440-22-4	Silver, metallic	-	0.1		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance						
DNEL type		Exposure route	Effect	Value			
7440-22-4	silver						
Worker DNEL,	long-term	inhalation	systemic	0,1 mg/m³			
7440-50-8	copper						
Worker DNEL,	, acute	inhalation	local	1 mg/m³			
Worker DNEL,	, acute	dermal	systemic	273 mg/kg bw/day			
Worker DNEL,	, acute	inhalation	systemic	20 mg/m³			
Worker DNEL,	, long-term	inhalation	local	1 mg/m³			
Worker DNEL,	, long-term	dermal	systemic	137 mg/kg bw/day			

PNEC values

CAS No	Substance			
Environmental	compartment	Value		
7440-50-8	copper			
Freshwater se	Freshwater sediment 87 mg/kg			
Marine sediment 67				
Soil	65 mg/kg			

8.2. Exposure controls



Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Wear eye protection/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

according to (EC) No. 1907/2006



Trade name: VD90.5101 / VD90.5103 / VD90.5104 / VD90.5105 / VD90.5106 / VD90.5107 / VD90.5108/

VD90.5109 / VD90.5110 / VD90.5115 MARTIN Lotkugeln bleifrei

Issue: May 2021

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solid
Colour: metallic
Odour: characteristic

pH-Value: not determined

Changes in the physical state

Melting point: 216-227 °C Initial boiling point and boiling range: not determined Flash point: not applicable

Flammability

Solid: not determined Gas: not applicable

Lower explosion limits: not determined Upper explosion limits: not determined

Auto-ignition temperature

Solid: not determined
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties Not oxidising.

Vapour pressure:

Density:

7,40 g/cm³

Water solubility:

The study does not need to be conducted because the substance is known to be

because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient: not determined Vapour density: not determined Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

according to (EC) No. 1907/2006



Trade name: VD90.5101 / VD90.5103 / VD90.5104 / VD90.5105 / VD90.5106 / VD90.5107 / VD90.5108/

VD90.5109 / VD90.5110 / VD90.5115 MARTIN Lotkugeln bleifrei

Issue: May 2021

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
7440-50-8	copper						
	Acute fish toxicity	LC50	21 mg/l	96 h			
	Acute crustacea toxicity	EC50 mg/l	0,34	48 h			

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

BCF

CAS No	Chemical name	BCF	Species	Source
7440-22-4	silver	70		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.6. Special precautions for user

No information available.

according to (EC) No. 1907/2006



Trade name: VD90.5101 / VD90.5103 / VD90.5104 / VD90.5105 / VD90.5106 / VD90.5107 / VD90.5108/

VD90.5109 / VD90.5110 / VD90.5115 MARTIN Lotkugeln bleifrei

Issue: May 2021

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H228 Flammable solid. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)