

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SN100C - SnCu_{0,7}Ni - Alloys ** Tin-Copper-Nickel-Alloys doped with Germanium

Revision date: 03/02/2023

Product code: 950002

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

1.1. Product identifier

SN100C - SnCu_{0,7}Ni - Alloys ** Tin-Copper-Nickel-Alloys doped with Germanium

Further trade names

This MSDS covers the following products:

SN100C; SN100Ce; SN100CS; SN100CeS; SN100CS+; SN100CeS+; SN100CL; SN100CLe; SN100C2;
SN100C3; SN100C4;

SnCu_{0,7}Ni; SnNi; SnCu_{0,7}NiGe; SnNiGe; SnCu_{0,7}Ni_{0,05}Ge_{0,025}; SnNi_{0,05}Ge_{0,025}; SnCu₂Ni; SnCu₃Ni;
SnCu₄Ni

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

Use of the substance/mixture

soft solder lead free

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	BALVER ZINN	
	Josef Jost GmbH & Co. KG	
Street:	Blintroper Weg 11	
Place:	D-58802 Balve	
Telephone:	+49 2375 915 - 0	Telefax: +49 2375 915 - 1700
e-mail:	cia@balverzinn.com	
e-mail (Contact person):	SDS@balverzinn.com	
Internet:	www.balverzinn.com	
Responsible Department:	Product Safety Department	
	Only available during office hours.	

1.4. Emergency telephone number:

+49 700 24 112 122 (Contract-ID: BZW)
from USA / Canada please call 011 49 700 24 112 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

EUH208 Contains nickel. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: none

2.3. Other hazards

For information or further instructions, see also section 11 or 12.

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

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CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7440-31-5	tin			> 90 %
	231-141-8		01-2119486474-28	
7440-50-8	Copper, massive			0 - 5 %
	231-159-6		01-2119480154-42	
7440-02-0	nickel			<0,1 %
	231-111-4	028-002-00-7	01-2119438727-29	
	Carc. 2, Skin Sens. 1, STOT RE 1, Aquatic Chronic 3; H351 H317 H372 H412			
7440-56-4	germanium			<0,1 %
	231-164-3		01-2120761271-61	
	Repr. 2, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 2; H361 H373 H400 H411			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7440-31-5	231-141-8	tin	> 90 %
	inhalation: LC50 = (>4,75) mg/l (dusts or mists); dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg		
7440-50-8	231-159-6	Copper, massive	0 - 5 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2500 mg/kg		
7440-02-0	231-111-4	nickel	<0,1 %
	inhalation: LC50 = 10,2 mg/l (dusts or mists); oral: LD50 = > 9000 mg/kg		
7440-56-4	231-164-3	germanium	<0,1 %
	oral: LD50 = > 2000 mg/kg		

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

No special measures are necessary.

The melted product can cause severe burns. After contact with molten product, cool skin area rapidly with cold water. Burns caused by molten material must be treated clinically.

After contact with eyes

No special measures are necessary.

After ingestion

No special measures are necessary.

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

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Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

In case of metal fire: Sand, Extinguishing powder, D-powder

Unsuitable extinguishing media

Extinguishing media which must not be used for safety reasons:
Water, High power water jet., Water spray jet

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Metal oxide smoke, toxic

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

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

Additional information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

See protective measures under point 7 and 8.

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

No special measures are necessary.

6.3. Methods and material for containment and cleaning up

For containment

Take up mechanically.

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

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information

Take up mechanically, placing in appropriate containers for disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

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

Provide adequate ventilation as well as local exhaustion at critical locations.

Do not inhale dust/fumes.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

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Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and after work. Do not eat, drink, smoke or sneeze at the workplace.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

No special measures are necessary.

Hints on joint storage

Do not store together with: Explosives. Radioactive substances. Infectious substances.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: 20°C

Protect against: Frost, UV-radiation/sunlight, Heat, moisture.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
7440-50-8	Copper, fume	-	0.2		TWA (8 h)	
7440-02-0	Nickel	-	0.5		TWA (8 h)	
7440-31-5	Tin (Metal)	-	2		TWA (8 h)	

Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
7440-02-0	Nickel	Ni	3 µg/L	Urine	After several consecutive working shifts

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
7440-31-5	tin			
	Consumer DNEL, long-term	inhalation	systemic	3,476 mg/m ³
	Consumer DNEL, acute	inhalation	systemic	3,476 mg/m ³
	Worker DNEL, long-term	inhalation	systemic	11,75 mg/m ³
	Worker DNEL, acute	inhalation	systemic	11,75 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	80 mg/kg bw/day
	Worker DNEL, acute	dermal	systemic	133,3 mg/kg bw/day
	Consumer DNEL, acute	dermal	systemic	80 mg/kg bw/day
	Worker DNEL, long-term	dermal	systemic	133,3 mg/kg bw/day
	Consumer DNEL, acute	oral	systemic	80 mg/kg bw/day
	Consumer DNEL, long-term	oral	systemic	80 mg/kg bw/day
7440-50-8	Copper, massive			
	Worker DNEL, long-term	dermal	systemic	137 mg/kg bw/day
	Worker DNEL, acute	dermal	systemic	273 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	local	1 mg/m ³
	Consumer DNEL, acute	inhalation	local	1 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	137 mg/kg bw/day
	Consumer DNEL, acute	dermal	systemic	273 mg/kg bw/day

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
DNEL type				
Consumer DNEL, long-term		oral	systemic	0,041 mg/kg bw/day
7440-02-0	nickel			
Worker DNEL, acute		inhalation	systemic	680 mg/m ³
Worker DNEL, long-term		inhalation	local	0,05 mg/m ³
Worker DNEL, long-term		inhalation	systemic	0,05 mg/m ³
Worker DNEL, acute		inhalation	local	11,9 mg/m ³
Worker DNEL, long-term		dermal	local	0,035 mg/cm ²
Consumer DNEL, long-term		inhalation	systemic	0,02 mg/m ³
Consumer DNEL, acute		inhalation	systemic	408 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,8 mg/m ³
Consumer DNEL, long-term		dermal	local	0,035 mg/cm ²
Consumer DNEL, long-term		oral	systemic	0,011 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,37 mg/kg bw/day
7440-56-4	germanium			
Worker DNEL, long-term		dermal	systemic	0,24 mg/kg bw/day

PNEC values

CAS No	Substance	Value
Environmental compartment		
7440-50-8	Copper, massive	
Freshwater		0,0078 mg/l
Marine water		0,0052 mg/l
Freshwater sediment		87 mg/kg
Marine sediment		676 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		65 mg/kg
7440-02-0	nickel	
Freshwater		0,0071 mg/l
Freshwater (intermittent releases)		0 mg/l
Marine water		0,0086 mg/l
Freshwater sediment		109 mg/kg
Marine sediment		109 mg/kg
Secondary poisoning		0,12 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,33 mg/l
Soil		29,9 mg/kg
7440-56-4	germanium	
Freshwater		0,0434 mg/l
Marine water		0,0434 mg/l
Freshwater sediment		599,4 mg/kg
Marine sediment		19,6 mg/kg
Micro-organisms in sewage treatment plants (STP)		7 mg/l
Soil		43,4 mg/kg

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8.2. Exposure controls**Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust at critical locations.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear eye/face protection.

Hand protection

Wear suitable gloves.

The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.

Skin protection

Protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Provide adequate ventilation as well as local exhaust at critical locations.

Respiratory protection necessary at: Exceeding exposure limit values smoke generation

Suitable respiratory protective equipment: Particle filter device (EN 143) Type: P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

No special environmental measures are necessary.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: solid

Colour: metallic, silver

Odour: odourless

Melting point/freezing point: 227 °C

Boiling point or initial boiling point and boiling range: not determined

Flammability

Solid/liquid: not determined

Lower explosion limits: not determined

Upper explosion limits: not determined

Flash point: not determined

Auto-ignition temperature: not determined

Decomposition temperature: not determined

pH-Value: not applicable

Viscosity / kinematic: not determined

Water solubility: The study does not need to be conducted because the substance is known to be insoluble in water.

Test method

N/A

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Solubility in other solvents

The study does not need to be conducted because the substance is known to be insoluble in water.

Vapour pressure:	not determined	
Density:	7,26 g/cm ³	N/A
Bulk density:	not determined	

9.2. Other information**Information with regard to physical hazard classes**

Explosive properties

none

Self-ignition temperature

Solid: not determined

Oxidizing properties

none

Other safety characteristics

Solid content: not determined

Sublimation point: not determined

Softening point: not determined

Viscosity / dynamic: not determined

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Can be released in case of fire: Metal oxide smoke, toxic

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Toxicokinetics, metabolism and distribution**

No information available.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7440-31-5	tin				
	oral	LD50 >2000 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 >2000 mg/kg	Rat	ECHA Dossier	
	inhalation (4 h) dust/mist	LC50 (>4,75) mg/l	Rat	ECHA Dossier	
7440-50-8	Copper, massive				
	oral	LD50 > 2500 mg/kg	Rat	ECHA Dossier	WoE
	dermal	LD50 > 2000 mg/kg	Rat	ECHA Dossier	WoE
7440-02-0	nickel				
	oral	LD50 > 9000 mg/kg	Rat	REACH Dossier	OECD Guideline 401
	inhalation (4 h) dust/mist	LC50 10,2 mg/l	Rat	REACH Dossier	
7440-56-4	germanium				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2012)	OECD Guideline 425

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Contains nickel. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No data available

SECTION 12: Ecological information**12.1. Toxicity**

No data available

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h][d]	Species	Source	Method
7440-50-8	Copper, massive					
	Acute fish toxicity	LC50 [0,004-1,1] mg/l	96 h	Fish	ECHA Dossier	READ ACROSS
	Acute algae toxicity	ErC50 [0,018-0,987] mg/l		algae (72-96h)	ECHA Dossier	READ ACROSS
	Acute crustacea toxicity	EC50 [0,001-0,792] mg/l	48 h	daphnia	ECHA Dossier	READ ACROSS
	Fish toxicity	NOEC [0,002-0,188] mg/l	12 d	Fish (4-330d)	ECHA Dossier	READ ACROSS
	Algae toxicity	NOEC [0,01-0,05] mg/l		algae (10-19d)	ECHA Dossier	READ ACROSS
	Crustacea toxicity	NOEC [0,004-0,145] mg/l		daphnia (4-240d)	ECHA Dossier	READ ACROSS
7440-02-0	nickel					
	Acute fish toxicity	LC50 [15,3] mg/l	96 h	Oncorhynchus mykiss	REACH Dossier	OECD 203
	Acute algae toxicity	ErC50 [> 0,0815 - < 0,148] mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 [0,0744-0,349] mg/l	48 h	daphnia	REACH Dossier	
	Fish toxicity	NOEC [< 0,035-15,42] mg/l		Fish [8-32d]	REACH Dossier	
	Algae toxicity	NOEC [< 0,1 - 1070] mg/l		algae [7 - 126]	REACH Dossier	
	Crustacea toxicity	NOEC [0,0053 - 0,713] mg/l		daphnia [7 - 126d]	REACH Dossier	
	Acute bacteria toxicity	(EC50 33 mg/l)	0,5 h	Activated sludge	REACH Dossier	ISO 8192
7440-56-4	germanium					
	Acute fish toxicity	LC50 > 96 mg/l	96 h	Danio rerio	Study report (2001)	OECD Guideline 203
	Acute algae toxicity	ErC50 0,20674 mg/l	72 h	Navicula pelliculosa	(2018)	OECD Guideline 201
	Acute crustacea toxicity	EC50 67,5 mg/l	48 h	Daphnia magna	Study report (2001)	OECD Guideline 202
	Algae toxicity	NOEC 1,1 mg/l	6 d	Ulva lactuca	Phycologia 21(2):125-130 (1982)	Macro-algae were tested in a continuous
	Acute bacteria toxicity	(EC50 > 1000 mg/l)	3 h	activated sludge of a predominantly domestic sewage	Study report	OECD Guideline 209

12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

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BCF

CAS No	Chemical name	BCF	Species	Source
7440-50-8	Copper, massive	0,02 - 20	Crangon crangon	
7440-02-0	nickel	0,019 - 5613		

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160304 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; inorganic wastes other than those mentioned in 16 03 03

List of Wastes Code - used product

160304 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; inorganic wastes other than those mentioned in 16 03 03

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number or ID number: No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

14.1. UN number or ID number: No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.1. UN number or ID number: No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

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14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 27, Entry 75

Information according to 2012/18/EU Not subject to 2012/18/EU (SEVESO III) (SEVESO III):

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

REACH 1907/2006 Appendix XVII, No (mixture): 27

National regulatory information

Water hazard class (D): - - non-hazardous to water

Additional information

Observe technical data sheet.

15.2. Chemical safety assessment

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

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 16.

Rev. 1.00; 06.05.2015, Initial release

Rev. 1.01; 30.10.2015, Indication of changes: chapter: 1, 16.

Rev.1.1; 22.09.2016, Indication of changes - chapter: 1, 16.

Rev.2.0; 16.04.2018, Changes in chapter: 15

Rev. 2.1; 27.04.2021, Changes in chapter: 1-16

Rev. 3.0/JTH; 03.02.2023, Changes in chapter: 1-16

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)

AGW: Arbeitsplatzgrenzwert

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

EINECS: European Inventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

ECHA: European Chemicals Agency

EWC: European Waste Catalogue

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

h: hour

LOAEL: Lowest observed adverse effect level

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LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect concentration
NLP: No-Longer Polymers
N/A: not applicable
OECD: Organisation for Economic Co-operation and Development
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
REACH: Registration, Evaluation, Authorisation of Chemicals
SVHC: substance of very high concern
TRGS: Technische Regeln für Gefahrstoffe
UN: United Nations
VOC: Volatile Organic Compounds

Relevant H and EUH statements (number and full text)

H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains nickel. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated and / or estimated.

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.)