

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

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

1.1 Product identifier

Trade name

Blei/Antimon Legierung

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

Relevant identified uses of the substance or mixture

Accumulator industry, milled lead sheet, metal casting
raw material for the chemical industry
Alloy

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Muldenhütten Recycling und Umwelttechnik GmbH
Industriegebiet Muldenhütten
Hüttenstraße
D-09599 Freiberg

Telephone no. +49 (0)3731 - 367-0
Fax no. +49 (0)3731 - 367-407
e-mail mru@berzelius.de

Information provided by / telephone

QHSE +49 (0)3731 - 367-0

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Lact.; H362
Repr. 1A; H360FD
STOT RE 1; H372

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS08

Signal word

Danger

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

Hazardous component(s) to be indicated on label:

lead massive [particle diameter \geq 1 mm]

Hazard statements

H360FD May damage fertility. May damage the unborn child.
 H362 May cause harm to breast-fed children.
 H372 Causes damage to central nervous system, blood and kidneys through prolonged or repeated exposure by inhalation or ingestion.

Precautionary statements

P201 Obtain special instructions before use.
 P260 Do not breathe dust/fume/spray.
 P263 Avoid contact during pregnancy/while nursing.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Supplemental label elements

"Restricted to professional users"

Labelling information

In the form in which it is marketed, the product causes no danger to health for humans through inhalation, swallowing or contact with the skin. There is therefore no obligation to label the product in accordance with:
 - regulation 1272/2008 (CLP: annex I; 1.3.4.: "Metals in massive form, alloys, mixtures containing polymers, mixtures containing elastomers).

2.3 Other hazards

Melting or operations generating dust, fume or vapours can result in sufficient lead entering the body to be hazardous to health. Oxidation products (including lead compounds) may also form on the surface of metallic lead. Lead is heavy and care should be taken when lifting and handling.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization

Alloy

Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	lead massive [particle diameter \geq 1 mm]		
	7439-92-1 231-100-4 - 01-2119513221-59	Repr. 1A; H360FD Lact.; H362 STOT RE 1; H372	< 100.00 %-b.w.
2	antimony		
	7440-36-0 231-146-5 - -	-	\geq 10.00 - < 25.00 %-b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Route, target organ, concrete effect
1	H372 -; central nervous system, kidney, haemolytic (blood) system; -

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician.

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

After inhalation

Ensure supply of fresh air.

After skin contact

Remove contaminated clothing. After skin contact immediately wash with water and soap and rinse thoroughly.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion

Rinse out mouth and give plenty of water or milk to drink. Call in a physician immediately and show him the Safety Data Sheet.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

Clinical manifestations of lead poisoning include weakness, irritability, asthenia, nausea, abdominal pain with constipation, and anaemia.

4.3 Indication of any immediate medical attention and special treatment needed

Symptoms of poisoning may appear several hours later.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray jet; Dry sand

Unsuitable extinguishing media

High power water jet; Foam

5.2 Special hazards arising from the substance or mixture

In case of fires, hazardous combustion gases are formed: Lead fumes; Lead oxide

5.3 Advice for firefighters

Appropriate breathing apparatus may be required. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Collect mechanically (preferably in dry condition). Send in suitable containers for recovery or disposal. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

Information regarding personal protective measures, see chapter 8. Information regarding waste disposal, see chapter 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation at the work area (local exhaust ventilation, if necessary).

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

General protective and hygiene measures

Keep separated from food-stuffs and feed-stocks. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Avoid contact with eyes and skin. Do not inhale dust/fumes/aerosols. Keep protective clothing separately

Advice on protection against fire and explosion

The product is not combustible.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

No special measures necessary.

Requirements for storage rooms and vessels

No special measures required.

Advice on storage assembly

Do not store together with foodstuffs. Do not store together with animal feedstocks. Do not store with combustible materials. Do not store with acids or alkalies.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	antimony	7440-36-0	231-146-5
List of approved workplace exposure limits (WELs) / EH40			
Antimony			
	TWA	0.5	mg/m ³

DNEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	lead massive [particle diameter ≥ 1 mm]			7439-92-1 231-100-4
	inhalative	Long term (chronic)	systemic	400 µg/l
	with reference to: blood			
	inhalative	Long term (chronic)	systemic	100 µg/l
	Remarks: for pregnant women, nursing mothers and children			

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

PNEC values

No	Substance name	CAS / EC no
	ecological compartment	Type
		Value
1	lead massive [particle diameter ≥ 1 mm]	7439-92-1 231-100-4
	water	fresh water
	water	fresh water sediment
	with reference to: dry weight Remarks: without correction for bioavailability	
	water	fresh water sediment
	with reference to: dry weight Remarks: with correction for bioavailability	
	water	marine water
	water	marine water sediment
	with reference to: dry weight	
	soil	-
	with reference to: dry weight	
	sewage treatment plant	-
	secondary poisoning	mammalian
	with reference to: food Remarks: food chain fresh water, food chain marine water, food chain soil	
	secondary poisoning	Bird
	with reference to: food	

Other information

Exposure limit value for inorganic lead and its compounds is as specified in Directive 98/24/EC:
0.15 mg/m³ in breathing air, 8 hours reference period.

Because of individually-varying oral lead exposure, there is no evidence for immediate relationship between blood lead level and air lead at workplace concentrations ranging around 0.1 mg lead/m³. Consequently, an increased blood lead level, due, for example, to oral exposure (by hand-to-mouth contact), is also possible if the occupational exposure limit of 0.1 mg/m³ is adhered to.

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respiratory filter (part): P2

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material neoprene

Appropriate Material leather

Other

Wear suitable protective clothing

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

Environmental exposure controls

One or more of the following measures may if necessary be taken to reduce emissions to water:

- Chemical precipitation: used primarily to remove the metal ions
- Sedimentation
- Filtration: used as final clarification step
- Electrolysis: for low metal concentration
- Reverse osmosis: extensively used for the removal of dissolved metals
- Ion exchange: final cleaning step in the removal of heavy metal from process wastewater

One or more of the following measures may if necessary be taken to reduce emissions to air:

- Electrostatic precipitators using wide electrode spacing: Wet electrostatic precipitators:
- Cyclones, but as primary collector Fabric or bag filters: high efficiency in controlling fine particulate (melting): achieve emission values Membrane filtration techniques can achieve
- Ceramic and metal mesh filters. PM10 particles are removed
- Wet scrubbers

Lead (compound) removal from treatment works should be at least the minimum default 84% removal used in the CSR. Solid material collected from on-site treatment must be sent for metal recovery or treated as hazardous waste. Waste water treatment sludge must be recycled, incinerated or landfilled and not used as agricultural fertiliser.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour	
solid	
silver-grey	
Odour	
odourless	
Odour threshold	
Not applicable	
pH value	
Not applicable	
Boiling point / boiling range	
Value	> 600 °C
Melting point / melting range	
Value	326 °C
Decomposition point / decomposition range	
Not applicable	
Flash point	
Not applicable	
Auto-ignition temperature	
Not applicable	
Oxidising properties	
not oxidizing	
Explosive properties	
The product does not have explosive properties.	
Flammability (solid, gas)	
The product is non-flammable.	
Lower flammability or explosive limits	
Not applicable	
Upper flammability or explosive limits	
Not applicable	

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

Vapour pressure	
Not applicable	
Vapour density	
Not applicable	
Evaporation rate	
Not applicable	
Relative density	
Value	11.45
Density	
No data available	
Solubility in water	
Value	185 mg/l
Reference temperature	20 °C
Solubility(ies)	
Not applicable	
Partition coefficient: n-octanol/water	
No data available	
Viscosity	
Not applicable	
Type	dynamic

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Lead is not a reactive substance.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

None, if handled according to intended use.

10.5 Incompatible materials

strong oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter ≥ 1 mm]	7439-92-1	231-100-4
LD50	>	2000	mg/kg bodyweight
Species	rat		
Source	CSR		

EC safety data sheet

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
LD50	>	2000	mg/kg bodyweight
Species	rabbit		
Source	CSR		

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
LC50	>	5	mg/l
Duration of exposure		4	h
State of aggregation	Dust		
Species	rat		
Source	CSR		

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
Route of exposure	respiratory tract		
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	Skin		
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are met.		

Carcinogenicity			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

STOT-single exposure			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

EC safety data sheet

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

STOT-repeated exposure			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
Source		CSR	
Evaluation/classification		Based on available data, the classification criteria are met.	
Aspiration hazard			
No data available			
Delayed and immediate effects as well as chronic effects from short and long-term exposure			
In case of oral ingestion, the lead content mobilised in the stomach and the intestinal tract regions and being available in the intestine can be resorbed by the organism. Prolonged excessive ingestion of lead compounds can affect amongst others the biosynthesis of haemoglobin and lead to irreversible nerve damage.			
Other information			
Lead in its solid metallic state is not toxic.			

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
LC50		107	$\mu\text{g/l}$
Duration of exposure		96	h
Species		Oncorhynchus mykiss	
with reference to		Pb, tests conducted with soluble lead salts; pH >5,5-8,5	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Toxicity to fish (chronic)			
No data available			
Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
EC50		170.5	$\mu\text{g/l}$
Duration of exposure		48	h
Species		Daphnia magna	
with reference to		Pb, tests conducted with soluble lead salts; pH <7,5-8,5	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Toxicity to Daphnia (chronic)			
No data available			
Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4
EC50		233.1	$\mu\text{g/l}$
Duration of exposure		72	h
Species		Pseudokirchneriella subcapitata	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information

Lead is rapidly removed from the water column and binds to suspended solid and sediment. Lead is an inorganic substance and does not degrade. It is persistent in the environment. Biodegradation is not relevant for inorganic substances. Inorganic lead is considered to be bioaccumulating in the environment, and may accumulate in aquatic and terrestrial plants and animals. Lead metal has very low solubility and is expected to be adsorbed onto soils and sediments. Mobility is expected to be low.
--

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Disposal should be done in accordance with national or regional regulations. The burden of proof must be satisfied. Unused product and residual quantities may be recycled in lead smelting works (waste management facilities).

Packaging

Dispose of in accordance with federal, state and local regulations.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

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

Not relevant

Trade name: Blei/Antimon Legierung

Current version : 3.0.0, issued: 09.01.2017

Replaced version: 2.0.0, issued: 22.05.2015

Region: GB

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	lead massive [particle diameter \geq 1 mm]	7439-92-1	231-100-4	30, 63

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

Other regulations

Adhere to the national regulations when using this product.

15.2 Chemical safety assessment

For the following substance/s in this mixture a chemical safety assessment has been carried out:

CAS no. 7439-92-1

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Department issuing safety data sheet

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO GmbH.