

Page 1 of 13 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute

# Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)

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

**1.1 Product identifier** 

# Blei-Ersatz Lead Substitute

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

Additives

Uses advised against: No information available at present.

#### 

LIQUI MOLY GmbH Jerg-Wieland-Str. 4 89081 Ulm-Lehr Tel.: (+49) 0731-1420-0 Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

# 1.4 Emergency telephone number Emergency information services / official advisory body:

Landspitali- The National University Hospital of Iceland, tel. +354 543 2222 or 112 (valid only for Iceland)

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR) +1 872 5888271 (LMR)

# **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture Classification according to Regulation (EC) 1272/2008 (CLP)						
Hazard class	Hazard category	Hazard statement				
Eye Dam.	1	H318-Causes serious eye damage.				
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.				

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)



Page 2 of 13

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute



#### Danger

H318-Causes serious eye damage. H304-May be fatal if swallowed and enters airways.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

P280-Wear eye protection. P301+P310-IF SWALLOWED: Immediately call a POISON CENTER / doctor. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P315-Get immediate medical advice / attention. P331-Do NOT induce vomiting.

P405-Store locked up.

P501-Dispose of contents / container to an approved waste disposal facility.

EUH066-Repeated exposure may cause skin dryness or cracking.

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate Distillates (petroleum), hydrotreated light Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

Dangerous vapours heavier than air.

In case of spreading near the ground, flashback to distance sources of ignition is possible.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

#### n.a. 3.2 Mixtures

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	918-481-9
CAS	
content %	70-90
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Asp. Tox. 1, H304
Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	231-308-5
CAS	7491-09-0
content %	3-<10



Page 3 of 13

ആ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315
	Eye Dam. 1, H318
Distillates (petroleum), hydrotreated light	
Registration number (REACH)	01-2119484819-18-XXXX
Index	649-422-00-2
EINECS, ELINCS, NLP, REACH-IT List-No.	265-149-8
CAS	64742-47-8
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here. Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here. The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

# **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

#### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

#### Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately. Danger of aspiration.

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. The following may occur: Headaches Dizziness Nausea With long-term contact: Product removes fat. Drying of the skin. Dermatitis (skin inflammation) Ingestion: Danger of aspiration. Oedema of the lungs Chemical pneumonitis (condition similar to pneumonia)

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

**SECTION 5: Firefighting measures** 



Page 4 of 13

œ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute

# 5.1 Extinguishing media

### Suitable extinguishing media

Cool container at risk with water. CO2 Extinction powder Alcohol resistant foam

#### Water jet spray Unsuitable extinguishing media High volume water jet

# 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Oxides of nitrogen Toxic pyrolysis products. Explosive vapour/air or gas/air mixtures.

#### 5.3 Advice for firefighters

For personal protective equipment see Section 8. In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. Full protection, if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures 6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination. Ensure sufficient ventilation, remove sources of ignition. Avoid dust formation with solid or powder products. Leave the danger zone if possible, use existing emergency plans if necessary. Ensure sufficient supply of air. Remove possible causes of ignition - do not smoke. Avoid inhalation, and contact with eyes or skin. Do not carry cleaning cloths soaked in product in trouser pockets. If applicable, caution - risk of slipping. Remove possible causes of ignition - do not smoke. 6.1.2 For emergency responders See section 8 for suitable protective equipment and material specifications. 6.2 Environmental precautions If leakage occurs, dam up. Resolve leaks if this possible without risk. Prevent from entering drainage system. Prevent surface and ground-water infiltration, as well as ground penetration. Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous. 6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13.

#### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

# **SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

# 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation. Keep away from sources of ignition - Do not smoke.



Page 5 of 13 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute

Do not heat to temperatures close to flash point.

Take measures against electrostatic charging, if appropriate.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use. Use working methods according to operating instructions.

#### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals. Store product closed and only in original packing. Not to be stored in gangways or stair wells.

Solvent resistant floor

ആ

Do not store with oxidizing agents.

Store in a well ventilated place.

Protect from direct sunlight and warming. Do not store over 40°C.

# 7.3 Specific end use(s)

No information available at present.

Observe the instructions for good working practice and the recommendations for risk assessment.

Human - dermal

Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

Chemical Name	Hydrocarbons, C10-C1	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics								
WEL-TWA: 800 mg/m3	W	WEL-STEL:								
Monitoring procedures:	- Drae	- Draeger - Hydrocarbons 0,1%/c (81 03 571)								
	- Drae	ger - Hydrocarbons 2/a (81 (	03 581)							
	- Com	pur - KITA-187 S (551 174)								
BMGV:		· · · ·	Other inform	nation: (C	DEL acc. to RC	P-method,				
			paragraphs	84-87, EH	40)					
Chemical Name	Distillates (petroleum),	hydrotreated light								
WEL-TWA: 800 mg/m3	, i i i i i i i i i i i i i i i i i i i	EL-STEL:								
Monitoring procedures:	- Drae	ger - Hydrocarbons 0,1%/c (	81 03 571)							
	- Drae	ger - Hydrocarbons 2/a (81 0	03 581) É							
	- Com	pur - KITA-187 S (551 174)	,							
BMGV:			Other inform	nation: (C	DEL acc. to RC	P-method,				
			paragraphs	84-87, EH	40)					
Potassium 1,2-bis(2-ethylhe)	yloxycarbonyl)ethanesulph	onate								
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note				
	Environmental									
	compartment									

 Human - inhalation
 DNEL
 46,6
 mg/m3

 Image: Set the set of the set o

DNEL

13.4

mg/kg bw/day

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU: (8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU). (11) = Inhalable fraction



Page 6 of 13 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute

(2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). | | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU: (8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |

| BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL))

| Other information (EH40/2005 Workplace exposure limits (Fourth Edition 2020)): Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:

(13) = The substance can cause sensitisation of the skin and of the respiratory tract (2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE).

#### 8.2 Exposure controls 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

ആ

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

#### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: Tight fitting protective goggles (EN 166) with side protection, with danger of splashes.

Skin protection - Hand protection: Solvent resistant protective gloves (EN ISO 374). If applicable Protective nitrile gloves (EN ISO 374). Protective Viton® / fluoroelastomer gloves (EN ISO 374). Minimum layer thickness in mm: 0,4 Permeation time (penetration time) in minutes: 480 Protective hand cream recommended. The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: Normally not necessary. If OES or MEL is exceeded. Gas mask filter A (EN 14387), code colour brown Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

Additional information on hand protection - No tests have been performed.



Page 7 of 13 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

#### 8.2.3 Environmental exposure controls

No information available at present.

ആ

#### **SECTION 9: Physical and chemical properties**

#### **9.1 Information on basic physical and chemical properties** Physical state:

Physical state: Colour: Colour: Odour: Melting point/freezing point: Boiling point or initial boiling point and boiling range: Flammability: Lower explosion limit:

Upper explosion limit:

Flash point: Auto-ignition temperature: Decomposition temperature: pH: Kinematic viscosity: Solubility: Partition coefficient n-octanol/water (log value): Vapour pressure: Density and/or relative density: Relative vapour density: Particle characteristics:

#### 9.2 Other information

Explosives: Oxidising liquids:

Red Clear Characteristic There is no information available on this parameter. ~180 °C Flammable 0,7 Vol-% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics) 6 Vol-% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics) 63 °C There is no information available on this parameter. There is no information available on this parameter. Mixture is non-soluble (in water). <7 mm2/s (40°C) Insoluble Does not apply to mixtures. There is no information available on this parameter. 0,822 g/cm3 (15°C) There is no information available on this parameter. Does not apply to liquids.

There is no information available on this parameter. There is no information available on this parameter.

# **SECTION 10: Stability and reactivity**

10.1 Reactivity
The product has not been tested.
10.2 Chemical stability
Stable with proper storage and handling.
10.3 Possibility of hazardous reactions
No dangerous reactions are known.
10.4 Conditions to avoid
Open flame, ignition sources
10.5 Incompatible materials
Avoid contact with strong oxidizing agents.
10.6 Hazardous decomposition products
No decomposition when used as directed.
SECTION 11: Toxicological information

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



Page 6 of 13 Sately data brack according to Regulation (EC) No 1907/2006, Annox II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Revision date / version: 0.11.2021 / 0024 PDF print date: 24.09.2024 Biel-Fraat Laad Substitute Possibly more information on health effects, see Section 2.1 (classification). Biel-Fraat Laad Substitute Possibly more information on health effects, see Section 2.1 (classification). Biel-Fraat Laad Substitute Possibly more information on health effects, see Section 2.1 (classification). Biel-Fraat Laad Substitute Possibly more information on health effects, see Section 2.1 (classification). Biel-Fraat Laad Substitute Possibly more information on health effects, see Section 2.1 (classification). Biel-Fraat Coxitity / effect Possibly more information on health effects, see Section 2.1 (classification). Biel-Fraat Coxitity / effect Possibly more information Revision (Stor) / for the possibly information: Revision (S	- @8									
Safety data sheet according to Regulation (EU) 2020/878) Revision date / version: 10.41.2021 / 0024 Valid from: 10.80.2022 PDF print class: 24.09.2024 Beacher and the experimentation of the experimentat	Page 8 of 13									
Revision date / version: 16.09.2022 / 0025 Replacing version table / version: 0.11.2021 / 0024 Valid from: 18.08.2022 Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification), Elei-Ersatz Lead Substitute Possibly information Respondurbly teoral note: Lead Substitute Protection (STOT-SE) Lead Substitute Protection (STOT-SE) Lead Possibly Possibly protection (STOT-SE) Lead Possibly Possible Possible Possibly protection (STOT-SE) Lead Possible P		egulation (EC)	No 1907/2006	. Annex II (last a	amended by Regul	lation (EU) 2020/878)				
Replacing version dated /version: 01.11.2021 / 0024 Valid from: 18.00 2022 PDF print date: 24.09.2024 Biel-Frazt Leed Substitute Possibly more information on bealth effects, see Section 2.1 (classification). Biel-Frazt Version: Value Vite Vite Vite Active toxicity, by oral route: Active toxicity, by inhalation: Active toxicity, by inhalation: Active toxicity, by inhalation: Active toxicity, by oral route: Active toxicity, active toxicity, active toxicity, active toxicity, by oral route: Active toxicity, b					annon ac a by rioga	(20) 2020,010)				
Valid from: 18.09.2022 Biel-Frazz Lead Substitute Poscibly more information on health effects, see Section 2.1 (classification). Elef-Frazz Lead Substitute Toxicity / defect Lead Substitute Sectore Substitute Lead Substitute Lead Substitute Lead Substitute Sectore Substitute Lead Substitute Sectore Substitute Lead Substitute Sectore Substitute Lead Substitute Sectore Substitute Lead S			/ 0024							
PDF print date: 24.09.2024 Biel-Frastz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification). Biel-Frastz Lead Substitute Possibly your flotte Endpoint Value Unit Organism Test method Notes  Acute toxicity, by organism Acute toxicity, Acute		1. 01.11.2021	0024							
Blei-Ersatz Lead Substitute Possibly more information on health effects, see Section 2.1 (classification). Biel-Fastz Lead Substitute Toxicity / effect Endpoint Value Unit Organism Test method n.d.a. Acute toxicity, by oral rote: Endpoint Acute toxicity, by oral rote: Endpoint Endp										
Lead Substitute           Possibly more information on health effects, see Section 2.1 (classification).           Biel-Frazit           Lead Substitute           Toxicity offect         Notes           Acute toxicity, by oral route:         Notes         Notes           Acute toxicity, by oral route:         Notes         Notes           Acute toxicity, by oral route:         Notes         Notes           Acute toxicity, by oral route:         Post colspan="2">Notes           Acute toxicity, by oral route:         Notes           Sections evel damagerintation:         A colspan="2">A colspan="2">Notes           Acute toxicity, by oral route:         A colspan="2">Notes           Acute toxicity, by oral route:         Notes           Acute toxicity, organ toxicity - repeated exposer (STOT-KE):         Imperate exposer (STOT-KE):         Notes           Acute toxicity, by oral route:         Log         Colspan= Toxicity for Col 40 (Acute Oral           Acute toxicity, by inhalation:         Imperate exposer (STOT-KE):         Notes										
Possibly more information on health effects, see Section 2.1 (classification).           Blei-Ersatz Lead Substitute         Index         Notes           Toxicity/ effect         Endpoint         Value         Unit         Organism         Test method         Notes           Acute toxicity, by dermal route:										
Biel-Fraiz         Endpoint         Value         Unit         Organism         Test method         Notes           Acute toxicity, by oral route:	Lead Substitute									
Biel-Fraiz         Endpoint         Value         Unit         Organism         Test method         Notes           Acute toxicity, by oral route:										
Lead Substitute         Unit         Organism         Test method         Notes           Acute toxicity, by orar route:         Acute toxicity, by orar route:         Notes         n.d.a.           Acute toxicity, by orar route:         Notes         n.d.a.         n.d.a.           Acute toxicity, by inhalation:         Notes         n.d.a.         n.d.a.           Serious eye damage/inflation:         Notes         n.d.a.         n.d.a.           Serious eye damage/inflation:         Notes         n.d.a.         n.d.a.           Germ call mutagenicity:         Notes         n.d.a.         n.d.a.           Specific target organ toxicity -         Notes         n.d.a.         n.d.a.           Specific target organ toxicity -         Notes         n.d.a.         n.d.a.           Symptoms:         Image: Specific target organ toxicity -         n.d.a.         n.d.a.           Toxicity / effect         Endpoint         Notes         n.d.a.         Notes           Symptoms:         Image: Specific target organ toxicity -         n.d.a.         n.d.a.           Acute toxicity, by orar route:         LD50         >3160         mg/gr         Rat         OECD 400 (Acute Oral           Acute toxicity, by inhalation:         LD50         >3160         mg/gr <td>Possibly more information on hea</td> <td>alth effects, see</td> <td>e Section 2.1 (</td> <td>classification).</td> <td></td> <td></td> <td></td>	Possibly more information on hea	alth effects, see	e Section 2.1 (	classification).						
Toxicity / effect         Endpoint         Value         Unit         Organism         Test method         Notes           Acute toxicity, by orar route:            n.d.a.         n.d.a.           Acute toxicity, by inhalation:            n.d.a.         n.d.a.           Skin corrosion/irritation:             n.d.a.         n.d.a.           Respiratory or skin semilitation:            n.d.a.         n.d.a.           Germ cell mutagenicity:            n.d.a.         n.d.a.           Germ cell mutagenicity:            n.d.a.         n.d.a.           Specific target organ toxicity:-           n.d.a.         n.d.a.           Specific target organ toxicity:-           n.d.a.         n.d.a.           Symptoms:            n.d.a.         n.d.a.           Toxicity / effect         Endpoint         Value         Unit         Organism         Test method         Notes           Acute toxicity, by orar toxits:         LD50         >3000         mgfra         Rat         OECD 401	Blei-Ersatz									
Toxicity / effect         Endpoint         Value         Unit         Organism         Test method         Notes           Acute toxicity, by orar route:            n.d.a.         n.d.a.           Acute toxicity, by inhalation:            n.d.a.         n.d.a.           Skin corrosion/irritation:             n.d.a.         n.d.a.           Respiratory or skin semilitation:            n.d.a.         n.d.a.           Germ cell mutagenicity:            n.d.a.         n.d.a.           Germ cell mutagenicity:            n.d.a.         n.d.a.           Specific target organ toxicity:-           n.d.a.         n.d.a.           Specific target organ toxicity:-           n.d.a.         n.d.a.           Symptoms:            n.d.a.         n.d.a.           Toxicity / effect         Endpoint         Value         Unit         Organism         Test method         Notes           Acute toxicity, by orar toxits:         LD50         >3000         mgfra         Rat         OECD 401	Lead Substitute									
Acute toxicity, by oral route:		Endpoint	Value	Unit	Organism	Test method	Notes			
Acute toxichy, by demain route:     Image: Constant of the constant		Linapoliti	Value	Unit	organishi	Test method				
Acute toxichy, by inhalation:										
Skin corrosion/irritation:	Acute toxicity, by definial foule.									
Serious eye damage/irritation:     n.d.a.       Respiratory or skin sensitisation:     n.d.a.       Carcinogenicity:     n.d.a.       Carcinogenicity:     n.d.a.       Carcinogenicity:     n.d.a.       Specific target organ toxicity - single exposure (STOT-SE):     n.d.a.       Specific target organ toxicity - repeated exposure (STOT-SE):     n.d.a.       Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, c2% aromatics     Notes       Acute toxicity, by oral route:     LD50     >5000     mg/g       Acute toxicity, by oral route:     LD50     >3160     mg/g     Rat       OECD 401 (Acute Oral Toxicity)     OECD 403 (Acute Inhalation Toxicity)     Vapours       Skin corrosion/irritation:     LC50     >4951     mg/m3     Rat     OECD 401 (Acute Oral Toxicity)       Serious eye damage/irritation:     LC50     >4951     mg/m3     Rat     OECD 402 (Acute Dermal Toxicity)       Skin corrosion/irritation:     LC50     >4951     mg/m3     Rat     OECD 404 (Acute Dermal Toxicity)										
Respiratory or skin sensitisation:     Image inclusion:     Image inclusion:     Image inclusion:       Germ cell mutagenicity:     Image inclusion:     Image inclusion:     Image inclusion:       Germ cell mutagenicity:     Image inclusion:     Image inclusion:     Image inclusion:       Reproductive toxicity:     Image inclusion:     Image inclusion:     Image inclusion:       Specific target organ toxicity - repeated exposure (STOT-RE):     Image inclusion:     Image inclusion:       Aspiration hazard:     Image inclusion:     Image inclusion:     Image inclusion:       Acute toxicity, by oral route:     LD50     >5000     mg/kg     Rat     OECD 401 (Acute Oral Toxicity)     Notes       Acute toxicity, by oral route:     LD50     >3160     mg/kg     Rat     OECD 402 (Acute Image inclusion)     Notes       Skin corrosion/irritation:     LC50     >4951     mg/m3     Rat     OECD 402 (Acute Image inclusion)     Not irritant, Acute toxicity       Serious ar										
sensitisation: Gerr cell mutagenicity: Carcinogenicity: Approductive toxicity: Specific target organ toxicity- repeated exposure (STOT-RE): Aspiration hazard: Symptoms: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, c2% aromatics Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by oral route: LD50 Section LC50 Section Section										
Germ cell mutagenicity:     n.d.a.       Carcinogenicity:     n.d.a.       Reproductive toxicity:     n.d.a.       single exposure (STOT-SE):     n.d.a.       Specific target organ toxicity -     n.d.a.       reposated exposure (STOT-SE):     n.d.a.       Specific target organ toxicity -     n.d.a.       reposated exposure (STOT-SE):     n.d.a.       Symptoms:     n.d.a.       Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics							n.d.a.			
Carcinogenicity       n.d.a.         Reproductive toxicity:       n.d.a.         Specific target organ toxicity - single exposure (STOT-RE):       n.d.a.         Specific target organ toxicity - repeated exposure (STOT-RE):       n.d.a.         Hydrocarbons, C10-C13, n-alkanes, isoalkanes; expelies, <2% aromatics	sensitisation:									
Reproductive toxicity:Image: constraint of the second	Germ cell mutagenicity:						n.d.a.			
Reproductive toxicity:Image: constraint of the second	Carcinogenicity:						n.d.a.			
Specific target organ toxicity single exposure (STOT-RE):       Image exposu							n.d.a.			
single exposure (STOT-SE): Specific target organ toxicity - repeated exposure (STOT-RE): Sprintion hazard: Hydrocarbons, C1O-C13, n-alkames, isoalkames, cyclics, <2% aromatics Toxicity / effect Acute toxicity, by oral route: LD50 >5000 mg/kg Acute toxicity, by oral route: LD50 >3160 mg/kg Acute toxicity, by oral route: LD50 >4951 mg/m3 Acute toxicity, by oral route: Acute toxicity, by oral route: LD50 >4951 mg/m3 Acute toxicity, by oral route: Acute toxicity, by oral route: Acute toxicity, by oral route: LD50 >4951 mg/m3 Acute toxicity, by oral route: Acute toxicity, by oral route: Acute toxicity, by inhalation: Acute toxicity, by inhalation: Acute toxicity, by oral route: Acute toxicity, by inhalation: Acute toxicity, by oral route: Acute toxicity, by oral route: Acute toxicity, by oral route: Acute toxicity, by inhalation: Acute toxicity, by oral route: Acute toxicity, by oral route: Acute toxicity, by oral route: Acute toxicity, by oral route: Acute toxicity: Acute toxic										
Specific target organ toxicity repeated exposure (STOT-RE):         Image: constraint of the specific target organ toxicity repeated exposure (STOT-RE):         Image: constraint of the specific target organ toxicity repeated exposure (STOT-RE):         Image: constraint of the specific target organ toxicity repeated exposure (STOT-RE):         Image: constraint of the specific target organ toxicity repeated exposure (STOT-RE):         Image: constraint of the specific target organ toxicity repeated exposure (STOT-RE):         Image: constraint of the specific target organ toxicity repeated exposure (STOT-RE):         Image: constraint on toxicity repeated exposure (STOT-RE):         Image: constraint on toxicity repeated exposure (STOT-RE):         Notes           Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% organisation toxicity repeated exposure (STOT-RE):         Value         Unit         Organism         Test method         Notes           Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% organisation										
repeated exposure (STOT-RE):         Image: Construct of the spiration hazard:         Image: Construct of the spirat							nda			
Aspiration hazard:							11.u.a.			
Symptoms:         Image: constraint of the symptoms of the sym										
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics         Toxicity / effect         Endpoint         Value         Unit         Organism         Test method         Notes           Acute toxicity, by oral route:         LD50         >5000         mg/kg         Rat         OECD 401 (Acute Oral Toxicity)         Notes           Acute toxicity, by dermal route:         LD50         >3160         mg/kg         Rabbit         OECD 402 (Acute Dermal Toxicity)         Vapours           Acute toxicity, by inhalation:         LC50         >4951         mg/m3         Rat         OECD 404 (Acute Inhalation Toxicity)         Vapours           Skin corrosion/irritation:           OECD 404 (Acute Dermal         Not irritant, Analogous conclusion         Analogous conclusion           Serious eye damage/irritation:           OECD 406 (Skin         Not sensitizsing, Analogous conclusion           Respiratory or skin sensitisation:           OECD 473 (In Vitro Marmalian Chromosome Aberration Test)         Not geative, Analogous conclusion           Germ cell mutagenicity:           Salmonella typhimurium         OECD 473 (In Vitro Marmalian Chromosome Aberration Test)         Negative, Analogous conclusion           Germ cell mutagenicity:          Salmonella typhimurium         OECD 474 (Marmalian Reverse										
Toxicity / effectEndpointValueUnitOrganismTest methodNotesAcute toxicity, by oral route:LD50>5000mg/kgRatOECD 401 (Acute Oral Toxicity)Acute toxicity, by dermal route:LD50>3160mg/kgRabitOECD 402 (Acute Dermal Toxicity)Acute toxicity, by inhalation:LC50>4951mg/m3RatOECD 403 (Acute Dermal Toxicity)VapoursSkin corrosion/irritation:LC50>4951mg/m3RatOECD 404 (Acute Dermal Dermal Corrosion)Not irritant, Analogous conclusionNot irritant, Analogous conclusionSerious eye damage/irritation:Image: Serious eye dama	Symptoms:						n.d.a.			
Toxicity / effectEndpointValueUnitOrganismTest methodNotesAcute toxicity, by oral route:LD50>5000mg/kgRatOECD 401 (Acute Oral Toxicity)Acute toxicity, by dermal route:LD50>3160mg/kgRabitOECD 402 (Acute Dermal Toxicity)Acute toxicity, by inhalation:LC50>4951mg/m3RatOECD 403 (Acute Dermal Toxicity)VapoursSkin corrosion/irritation:LC50>4951mg/m3RatOECD 404 (Acute Dermal Dermal Corrosion)Not irritant, Analogous conclusionNot irritant, Analogous conclusionSerious eye damage/irritation:Image: Serious eye dama										
Acute toxicity, by oral route:       LD50       >5000       mg/kg       Rat       OECD 401 (Acute Oral Toxicity)         Acute toxicity, by dermal route:       LD50       >3160       mg/kg       Rabbit       OECD 402 (Acute Dermal Toxicity)       Vapours         Acute toxicity, by inhalation:       LC50       >4951       mg/m3       Rat       OECD 403 (Acute Dermal Toxicity)       Vapours         Skin corrosion/irritation:       LC50       >4951       mg/m3       Rat       OECD 403 (Acute Dermal Toxicity)       Not irritant, Analogous conclusion         Serious eye damage/irritation:       DECD 405 (Acute Eye Not irritant, Analogous conclusion)       Not irritant, Analogous conclusion       Analogous conclusion       Not irritant, Analogous conclusion         Respiratory or skin sensitization:       DECD 406 (Skin Not sensitization)       Not sensitiziting, Analogous conclusion       Analogous conclusion         Germ cell mutagenicity:       DECD 404 (Marmalian Erythrocyte Analogous conclusion       Negative, Analogous conclusion       Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 473 (In Vitro Marmalian Erythrocyte Analogous conclusion       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       <					I.		T			
Acute toxicity, by dermal route:LD50>3160mg/kgRabbitOECD 402 (Acute Dermal Toxicity)Acute toxicity, by inhalation:LC50>4951mg/m3RatOECD 403 (Acute Inhalation Toxicity)VapoursSkin corrosion/irritation:	Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Acute toxicity, by dermal route:       LD50       >3160       mg/kg       Rabbit       OECD 402 (Acute Dermal Toxicity)         Acute toxicity, by inhalation:       LC50       >4951       mg/m3       Rat       OECD 403 (Acute Inhalation Toxicity)       Vapours         Skin corrosion/irritation:       Serious eye damage/irritation:       OECD 404 (Acute Dermal Invitation/Corrosion)       Not irritant, Analogous conclusion         Serious eye damage/irritation:       OECD 406 (Acute Eye Invitation/Corrosion)       Not irritant, Analogous conclusion         Respiratory or skin sensitisation:       OECD 406 (Skin Sensitisation)       Not sensitizing, Analogous conclusion         Germ cell mutagenicity:       OECD 473 (In Vitro Margue, Analogous conclusion       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella       OECD 474 (Mammalian Corrosion)       Analogous conclusion         Germ cell mutagenicity:       Salmonella       OECD 474 (Marmalian Corrosion)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella       OECD 474 (Marmalian Corrosion)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella       OECD 474 (Marmalian Corrosion)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion	Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral				
Acute toxicity, by inhalation:LC50>4951mg/m3RatOECD 403 (Acute Inhalation Toxicity)VapoursSkin corrosion/irritation:Image: State of the st						Toxicity)				
Acute toxicity, by inhalation:LC50>4951mg/m3RatOECD 403 (Acute Inhalation Toxicity)VapoursSkin corrosion/irritation:Image: State of the st	Acute toxicity, by dermal route:	LD50	>3160	mg/kg	Rabbit	OECD 402 (Acute				
Acute toxicity, by inhalation:       LC50       >4951       mg/m3       Rat       OECD 403 (Acute Inhalation Toxicity)       Vapours         Skin corrosion/irritation:       Image: Skin corrosion/irritation:       OECD 404 (Acute Inhalation Toxicity)       Not irritant, Analogous conclusion         Serious eye damage/irritation:       Image: Skin corrosion/irritation/Corrosion)       OECD 405 (Acute Eye Irritation/Corrosion)       Not irritant, Analogous conclusion         Respiratory or skin sensitisation:       OECD 405 (Acute Eye Irritation/Corrosion)       Not irritant, Analogous conclusion         Germ cell mutagenicity:       Image: Skin corrosion/irritation       OECD 473 (In Vitro Aberration Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Image: Skin corrosion/irritation/Corrosion       Salmonella Urritation/Corrosion       Negative, Analogous conclusion         Germ cell mutagenicity:       Image: Skin corrosion/irritation Test)       Negative, Analogous conclusion       Negative, Analogous conclusion         Germ cell mutagenicity:       Image: Skin corrosion/irritation Test)       Negative, Analogous conclusion       Negative, Analogous conclusion         Carcinogenicity:       Image: Skin corrosicity Carcinogenicity:       Salmonella Urritation Test)       Negative, Analogous conclusion         Reproductive toxicity:       Image: Skin corrosicity Suddes)       Negative, Analogous conclusion       Negative, Analogous conclusi										
Skin corrosion/irritation:Inhalation Toxicity)Inhalation Toxicity)Skin corrosion/irritation:OECD 404 (Acute Dermal Irritation/Corrosion)Not irritant, Analogous conclusionSerious eye damage/irritation:OECD 405 (Acute Eye Irritation/Corrosion)Not irritant, Analogous conclusionRespiratory or skin sensitisation:OECD 406 (Skin Sensitisation)Not sensitizising, Analogous conclusionGerm cell mutagenicity:OECD 473 (In Vitro Marmalian Chromosome Aberration Test)Negative, Analogous conclusionGerm cell mutagenicity:OECD 474 (Marmalian typhinurium Reproductive toxicity:Negative, Analogous conclusionGerm cell mutagenicity:Salmonella typhimuriumOECD 471 (Bacterial Reverse Mutation Test)Germ cell mutagenicity:Salmonella typhimuriumOECD 413 (Combined Chromosome Aberration Test)Reproductive toxicity:Salmonella typhimuriumOECD 414 (Prenatal Developmental Toxicity Study)Reproductive toxicity:OECD 414 (Prenatal Developmental Toxicity Study)Negative, Analogous conclusionSpecific target organ toxicity- repeated exposure (STOT-RE):Negative, Analogous conclusionNegative, Analogous conclusion	Acute toxicity by inhalation:	LC50	>4951	ma/m3	Rat		Vapours			
Skin corrosion/irritation:     OECD 404 (Acute Dermal Irritation/Corrosion)     Not irritant, Analogous conclusion       Serious eye damage/irritation:     OECD 405 (Acute Eye Irritation/Corrosion)     Not irritant, Analogous conclusion       Respiratory or skin sensitisation:     OECD 406 (Skin Sensitisation)     Not sensitizising, Analogous conclusion       Germ cell mutagenicity:     OECD 473 (In Vitro Marmalian Chromosome Aberration Test)     Negative, Analogous conclusion       Germ cell mutagenicity:     OECD 474 (Marmalian Erythrocyte     Negative, Analogous conclusion       Germ cell mutagenicity:     OECD 474 (Marmalian Erythrocyte     Negative, Analogous conclusion       Germ cell mutagenicity:     OECD 474 (Marmalian Erythrocyte     Negative, Analogous conclusion       Germ cell mutagenicity:     Salmonella typhimurium     Negative, Analogous conclusion       Germ cell mutagenicity:     Salmonella typhimurium     Negative, Analogous conclusion       Germ cell mutagenicity:     Salmonella typhimurium     Negative, Analogous conclusion       Reproductive toxicity:     OECD 414 (Prenatal Developmental Toxicity Studig)     Negative, Analogous conclusion       Specific target organ toxicity - repeated exposure (STOT-RE):     OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)     Negative, Analogous conclusion	, louio loviolij, by initalation						, apoulo			
Serious eye damage/irritation:Dermal conclusionAnalogous <b< td=""><td></td><td></td><td></td><td>ing/ins</td><td></td><td>Inhalation Toxicity)</td><td></td></b<>				ing/ins		Inhalation Toxicity)				
Serious eye damage/irritation:Image: ConclusionconclusionSerious eye damage/irritation:Image: ConclusionNot irritant, Analogous conclusionNot irritant, Analogous conclusionRespiratory or skin sensitisation:Image: ConclusionOECD 406 (Skin Sensitisation)Not sensitizising, Analogous conclusionGerm cell mutagenicity:Image: ConclusionOECD 473 (In Vitro Marmalian Chromosome Aberration Test)Negative, Analogous conclusionGerm cell mutagenicity:Image: Conclusion Aberration Test)Negative, Analogous conclusionNegative, Analogous conclusionGerm cell mutagenicity:Image: Conclusion Aberration Test)Negative, Analogous conclusio							Not irritant			
Serious eye damage/irritation:       OECD 405 (Acute Eye Irritation/Corrosion)       Not irritant, Analogous conclusion         Respiratory or skin sensitisation:       OECD 406 (Skin Sensitisation)       Not sensitizising, Analogous conclusion         Germ cell mutagenicity:       OECD 473 (In Vitro Mammalian Chromosome Aberration Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       OECD 474 (Mammalian Erythrocyte Micronucleus Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       OECD 474 (Mammalian Erythrocyte Micronucleus Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Carcinogenicity:       Salmonella typhimurium       OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)       Negative, Analogous conclusion         Reproductive toxicity:       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)       Negative, Analogous conclusion				ing/ins		OECD 404 (Acute				
Respiratory or skin sensitisation:Irritation/Corrosion)Analogous conclusionGerm cell mutagenicity:OECD 470 (lskin Analogous conclusion)Not sensitizising, Analogous conclusionGerm cell mutagenicity:OECD 473 (ln Vitro Mammalian Chromosome Aberration Test)Negative, Analogous conclusionGerm cell mutagenicity:OECD 474 (Mammalian Analogous conclusion)Negative, Analogous conclusionGerm cell mutagenicity:OECD 474 (Mammalian Aberration Test)Negative, Analogous conclusionGerm cell mutagenicity:Salmonella typhimuriumOECD 471 (Bacterial Reverse Mutation Test)Negative, Analogous conclusionGerm cell mutagenicity:Salmonella typhimuriumOECD 473 (Combined Chronic Toxicity/Carcinogenicity studies)Negative, Analogous conclusionReproductive toxicity:OECD 474 (Prenatal Developmental Toxicity, Study)Negative, Analogous conclusionSpecific target organ toxicity - repeated exposure (STOT-RE):Salmonella Coecd exposure (STOT-RE):Negative, Analogous conclusion						OECD 404 (Acute Dermal	Analogous			
Respiratory or skin sensitization:       OECD 406 (Skin Not sensitizising, Analogous conclusion)         Germ cell mutagenicity:       OECD 473 (In Vitro Marmalian Chromosome Aberration Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       OECD 474 (Mammalian Chromosome Aberration Test)       Analogous conclusion         Germ cell mutagenicity:       OECD 474 (Mammalian Chromosome Aberration Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium Reverse Mutation Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium Reverse Mutation Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium Reverse Mutation Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium Reverse Mutation Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       OECD 471 (Bacterial typhimurium Reverse Mutation Test)       Negative, Analogous conclusion         Reproductive toxicity:       OECD 493 (Combined Chronic Toxicity/Carcinogenicity Studies)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) <td< td=""><td>Skin corrosion/irritation:</td><td></td><td></td><td></td><td></td><td>OECD 404 (Acute Dermal Irritation/Corrosion)</td><td>Analogous conclusion</td></td<>	Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Analogous conclusion			
Respiratory or skin sensitisation:       OECD 406 (Skin Sensitisation)       Not sensitizising, Analogous conclusion         Germ cell mutagenicity:       OECD 473 (In Vitro Mammalian Chromosome Aberration Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       OECD 474 (Mammalian Erythrocyte Micronucleus Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Carcinogenicity:       Salmonella typhimurium       OECD 473 (Combined Chronic Toxicity/Carcinogenicity Studies)       Negative, Analogous conclusion         Reproductive toxicity:       OECD 474 (Prenatal Developmental Toxicity Study)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 470 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)       Negative, Analogous conclusion	Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye	Analogous conclusion Not irritant,			
sensitisation:       Sensitisation       Analogous conclusion         Germ cell mutagenicity:       OECD 473 (In Vitro Marmalian Landogous conclusion       Negative, Analogous conclusion         Germ cell mutagenicity:       OECD 474 (Marmalian Erythrocyte Analogous conclusion       Analogous conclusion         Germ cell mutagenicity:       OECD 474 (Marmalian Erythrocyte Analogous conclusion       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 473 (Combined Chronic Chronic Studies)       Negative, Analogous conclusion         Carcinogenicity:       OECD 473 (Combined Chronic Studies)       Negative, Analogous conclusion       Negative, Analogous conclusion         Reproductive toxicity:       OECD 4114 (Prenatal Developmental Toxicity Studies)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Conclusion       Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Conclusion       Analogous conclusion	Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye	Analogous conclusion Not irritant, Analogous			
Germ cell mutagenicity:       Conclusion       Conclusion         Germ cell mutagenicity:       Mammalian       Chromosome       Analogous         Germ cell mutagenicity:       Mammalian       Chromosome       Conclusion         Germ cell mutagenicity:       Mammalian       Negative,         Germ cell mutagenicity:       Mammalian       Negative,         Germ cell mutagenicity:       Salmonella       OECD 474 (Mammalian Erythrocyte Micronucleus Test)       Negative,         Germ cell mutagenicity:       Salmonella       OECD 471 (Bacterial typhimurium       Negative,         Germ cell mutagenicity:       Salmonella       OECD 473 (Combined Chronic       Negative,         Germ cell mutagenicity:       Salmonella       OECD 471 (Bacterial Reverse Mutation Test)       Negative,         Germ cell mutagenicity:       Salmonella       OECD 453 (Combined Chronic       Negative,         Carcinogenicity:       Salmonella       OECD 454 (Prentatal Reverse Mutation Test)       Negative,         Reproductive toxicity:       Sudition       OECD 414 (Prentatal Developmental Toxicity Analogous conclusion       Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       Sudition       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Conclusion       Analogous conclusion         Specific target organ toxici	Skin corrosion/irritation: Serious eye damage/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion)	Analogous conclusion Not irritant, Analogous conclusion			
Germ cell mutagenicity:       Image: Conclusion of the second secon	Skin corrosion/irritation: Serious eye damage/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin	Analogous conclusion Not irritant, Analogous conclusion			
Germ cell mutagenicity:       Analogous       conclusion         Germ cell mutagenicity:       OECD 474 (Mammalian Erythrocyte Analogous conclusion)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Carcinogenicity:       OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)       Negative, Analogous conclusion         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Studies)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Analogous conclusion)       Negative, Analogous conclusion         Rodents)       OECD 408 (Repeated Negative, Analogous conclusion)       Analogous conclusion       Conclusion	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising,			
Germ cell mutagenicity:       Analogous       conclusion         Germ cell mutagenicity:       OECD 474 (Mammalian Erythrocyte Analogous conclusion)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Carcinogenicity:       OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)       Negative, Analogous conclusion         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Studies)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Analogous conclusion)       Negative, Analogous conclusion         Rodents)       OECD 408 (Repeated Negative, Analogous conclusion)       Analogous conclusion       Conclusion	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous			
Germ cell mutagenicity:       Chromosome Aberration Test)       Conclusion         Germ cell mutagenicity:       OECD 474 (Mammalian Erythrocyte       Negative, Analogous         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous         Carcinogenicity:       OECD 471 (Bacterial typhimurium       Negative, Analogous       Negative, Analogous         Carcinogenicity:       OECD 453 (Combined Chronic       Negative, Analogous       Analogous         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Studies)       Negative, Analogous       Analogous         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)       Negative, Analogous	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation)	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion			
Germ cell mutagenicity:Aberration Test)Negative, Analogous conclusionGerm cell mutagenicity:Salmonella typhimuriumOECD 474 (Mammalian Erythrocyte Micronucleus Test)Negative, Analogous conclusionGerm cell mutagenicity:Salmonella typhimuriumOECD 471 (Bacterial Reverse Mutation Test)Negative, Analogous conclusionCarcinogenicity:OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)Negative, Analogous conclusionReproductive toxicity:OECD 453 (Combined ChronicNegative, Analogous conclusionSpecific target organ toxicity - repeated exposure (STOT-RE):Negative, ChronicNegative, Analogous conclusionSpecific target organ toxicity - repeated exposure (STOT-RE):Second Study Study in ConclusionNegative, Analogous conclusionSpecific target organ toxicity - repeated exposure (STOT-RE):Second Study Study in Study in Study in Study in Study in Rodents)Second Study in Study in Study in Study in Study in Study in	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative,			
Germ cell mutagenicity:       OECD 474 (Mammalian Erythrocyte Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative, Analogous conclusion         Carcinogenicity:       Salmonella typhimurium       OECD 453 (Combined Chronic Analogous conclusion)       Negative, Analogous conclusion         Reproductive toxicity:       OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)       Negative, Analogous conclusion         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Study)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Negative, Analogous conclusion Rodents)	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous			
Germ cell mutagenicity:       Analogous conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative         Carcinogenicity:       OECD 453 (Combined Chronic Analogous conclusion)       Negative, Analogous conclusion       Analogous conclusion         Reproductive toxicity:       OECD 453 (Combined Chronic Analogous conclusion)       Negative, Analogous conclusion       Analogous conclusion         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Studies)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)       Negative, Analogous conclusion	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous			
Germ cell mutagenicity:       Conclusion         Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative         Carcinogenicity:       OECD 453 (Combined Chronic       Negative, Analogous         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity       Negative, Analogous         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)       Negative, Analogous conclusion	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion			
Germ cell mutagenicity:       Salmonella typhimurium       OECD 471 (Bacterial Reverse Mutation Test)       Negative,         Carcinogenicity:       OECD 453 (Combined Chronic       Negative,         Reproductive toxicity:       OECD 453 (Combined Chronic       Negative,         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity       Negative,         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral       Negative,         Malogous conclusion       Developmental Toxicity Study       Negative,         Analogous conclusion       Conclusion	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion			
Carcinogenicity:       Carcinogenicity:       OECD 453 (Combined Chronic       Negative, Analogous conclusion         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)       Negative, Analogous conclusion	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion			
Carcinogenicity:       OECD 453 (Combined Chronic       Negative, Analogous conclusion         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Study)       Negative, Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)       Negative, Analogous conclusion	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity:					OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion			
Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion			
Reproductive toxicity:       Conclusion         Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test)	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion			
Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 453 (Combined	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative Megative			
Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 453 (Combined Chronic	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative Analogous conclusion			
Reproductive toxicity:       OECD 414 (Prenatal Developmental Toxicity Analogous conclusion         Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 453 (Combined Chronic	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative Analogous conclusion			
Specific target organ toxicity - repeated exposure (STOT-RE):     Analogous conclusion       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)     Negative, Analogous conclusion	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 453 (Combined Chronic Toxicity/Carcinogenicity	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative Analogous conclusion			
Specific target organ toxicity - repeated exposure (STOT-RE):       Conclusion         Image: Conclusion of the system       OECD 408 (Repeated Dose 90-Day Oral Analogous Toxicity Study in Conclusion Rodents)       Negative, Analogous Conclusion	Skin corrosion/irritation:         Serious eye damage/irritation:         Respiratory or skin sensitisation:         Germ cell mutagenicity:         Germ cell mutagenicity:         Germ cell mutagenicity:         Carcinogenicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative Negative, Analogous conclusion			
Specific target organ toxicity - repeated exposure (STOT-RE):       OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)       Negative, Analogous conclusion	Skin corrosion/irritation:         Serious eye damage/irritation:         Respiratory or skin sensitisation:         Germ cell mutagenicity:         Germ cell mutagenicity:         Germ cell mutagenicity:         Carcinogenicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) OECD 414 (Prenatal	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion			
repeated exposure (STOT-RE):	Skin corrosion/irritation:         Serious eye damage/irritation:         Respiratory or skin sensitisation:         Germ cell mutagenicity:         Germ cell mutagenicity:         Germ cell mutagenicity:         Carcinogenicity:				Salmonella	OECD 404 (Acute         Dermal         Irritation/Corrosion)         OECD 405 (Acute Eye         Irritation/Corrosion)         OECD 405 (Acute Eye         Irritation/Corrosion)         OECD 406 (Skin         Sensitisation)         OECD 473 (In Vitro         Mammalian         Chromosome         Aberration Test)         OECD 474 (Mammalian         Erythrocyte         Micronucleus Test)         OECD 471 (Bacterial         Reverse Mutation Test)         OECD 453 (Combined         Chronic         Toxicity/Carcinogenicity         Studies)         OECD 414 (Prenatal         Developmental Toxicity	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion			
Toxicity Study in conclusion Rodents)	Skin corrosion/irritation:         Serious eye damage/irritation:         Respiratory or skin sensitisation:         Germ cell mutagenicity:         Germ cell mutagenicity:         Germ cell mutagenicity:         Carcinogenicity:         Reproductive toxicity:				Salmonella	OECD 404 (Acute Dermal Irritation/Corrosion) OECD 405 (Acute Eye Irritation/Corrosion) OECD 406 (Skin Sensitisation) OECD 473 (In Vitro Mammalian Chromosome Aberration Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) OECD 414 (Prenatal Developmental Toxicity Study)	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion			
Rodents)	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ toxicity -				Salmonella	OECD 404 (Acute         Dermal         Irritation/Corrosion)         OECD 405 (Acute Eye         Irritation/Corrosion)         OECD 405 (Acute Eye         Irritation/Corrosion)         OECD 406 (Skin         Sensitisation)         OECD 473 (In Vitro         Mammalian         Chromosome         Aberration Test)         OECD 474 (Mammalian         Erythrocyte         Micronucleus Test)         OECD 471 (Bacterial         Reverse Mutation Test)         OECD 453 (Combined         Chronic         Toxicity/Carcinogenicity         Studies)         OECD 414 (Prenatal         Developmental Toxicity         Study)         OECD 408 (Repeated	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion			
	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ toxicity -				Salmonella	OECD 404 (Acute         Dermal         Irritation/Corrosion)         OECD 405 (Acute Eye         Irritation/Corrosion)         OECD 405 (Acute Eye         Irritation/Corrosion)         OECD 406 (Skin         Sensitisation)         OECD 473 (In Vitro         Mammalian         Chromosome         Aberration Test)         OECD 474 (Mammalian         Erythrocyte         Micronucleus Test)         OECD 471 (Bacterial         Reverse Mutation Test)         OECD 453 (Combined         Chronic         Toxicity/Carcinogenicity         Studies)         OECD 414 (Prenatal         Developmental Toxicity         Study)         OECD 408 (Repeated         Dose 90-Day Oral	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion			
Aspiration hazard: Yes	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ toxicity -				Salmonella	OECD 404 (Acute         Dermal         Irritation/Corrosion)         OECD 405 (Acute Eye         Irritation/Corrosion)         OECD 406 (Skin         Sensitisation)         OECD 406 (Skin         Sensitisation)         OECD 473 (In Vitro         Mammalian         Chromosome         Aberration Test)         OECD 474 (Mammalian         Erythrocyte         Micronucleus Test)         OECD 471 (Bacterial         Reverse Mutation Test)         OECD 453 (Combined         Chronic         Toxicity/Carcinogenicity         Studies)         OECD 414 (Prenatal         Developmental Toxicity         Study)         OECD 408 (Repeated         Dose 90-Day Oral         Toxicity Study in	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion			
	Skin corrosion/irritation:         Serious eye damage/irritation:         Respiratory or skin sensitisation:         Germ cell mutagenicity:         Germ cell mutagenicity:         Germ cell mutagenicity:         Carcinogenicity:         Reproductive toxicity:         Specific target organ toxicity - repeated exposure (STOT-RE):				Salmonella	OECD 404 (Acute         Dermal         Irritation/Corrosion)         OECD 405 (Acute Eye         Irritation/Corrosion)         OECD 406 (Skin         Sensitisation)         OECD 406 (Skin         Sensitisation)         OECD 473 (In Vitro         Mammalian         Chromosome         Aberration Test)         OECD 474 (Mammalian         Erythrocyte         Micronucleus Test)         OECD 471 (Bacterial         Reverse Mutation Test)         OECD 453 (Combined         Chronic         Toxicity/Carcinogenicity         Studies)         OECD 414 (Prenatal         Developmental Toxicity         Study)         OECD 408 (Repeated         Dose 90-Day Oral         Toxicity Study in	Analogous conclusion Not irritant, Analogous conclusion Not sensitizising, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion Negative, Analogous conclusion			



Page 9 of 13
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)
Revision date / version: 18.09.2022 / 0025
Replacing version dated / version: 01.11.2021 / 0024
Valid from: 18.09.2022
PDF print date: 24.09.2024
Blei-Érsatz
Lead Substitute

œ

Symptoms:		unconsciousness
		, headaches,
		dizziness,
		mucous
		membrane
		irritation

# 11.2. Information on other hazards

Blei-Ersatz						
Lead Substitute						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply
						to mixtures.
Other information:						No other
						relevant
						information
						available on
						adverse effects
						on health.
<u></u>			1			1

# Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics</th> Toxicity / effect Endpoint Value Unit Organism Test method Notes Other information: Image: Color of the state of the state

# **SECTION 12: Ecological information**

Possibly more information on environmental effects, see Section 2.1 (classification).									
Blei-Ersatz									
Lead Substitute									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
12.1. Toxicity to fish:							n.d.a.		
12.1. Toxicity to daphnia:							n.d.a.		
12.1. Toxicity to algae:							n.d.a.		
12.2. Persistence and							n.d.a.		
degradability:									
12.3. Bioaccumulative							n.d.a.		
potential:									
12.4. Mobility in soil:							n.d.a.		
12.5. Results of PBT							n.d.a.		
and vPvB assessment									
12.6. Endocrine							Does not apply		
disrupting properties:							to mixtures.		
12.7. Other adverse							No information		
effects:							available on		
							other adverse		
							effects on the		
							environment.		

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
12.1. Toxicity to fish:	NOELR	28d	0,101	mg/l	Oncorhynchus mykiss				
12.1. Toxicity to fish:	LL50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)			



Page 10 of 13

ആ

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute

12.1. Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOELR	21d	0,176	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	80	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		10-2500				High
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Other organisms:	EL50	48h	>1000	mg/l	Tetrahymen pyriformis		
Water solubility:							Product floats on the water surface.

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.2. Persistence and							Readily
degradability:							biodegradable

# **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods

# For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

07 01 04 other organic solvents, washing liquids and mother liquors

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Implement substance recycling.

E.g. suitable incineration plant.

#### For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

# **SECTION 14: Transport information**

# **General statements**

# Transport by road/by rail (ADR/RID)

14.1. UN number or ID number:14.2. UN proper shipping name:Not applicable14.3. Transport hazard class(es):

Not applicable

Not applicable



- (68)			
Page 11 of 13			
Safety data sheet according to Regulation (EC) No 1907/2006, Annex I	I (last amended by Regulation (EU) 2020/878)		
Revision date / version: 18.09.2022 / 0025			
Replacing version dated / version: 01.11.2021 / 0024			
Valid from: 18.09.2022			
PDF print date: 24.09.2024			
Blei-Ersatz Lead Substitute			
14.4. Packing group:	Not applicable		
14.5. Environmental hazards:	Not applicable		
Tunnel restriction code:	Not applicable		
Classification code:	Not applicable		
LQ:	Not applicable		
Transport category:	Not applicable		
Transport by sea (IMDG-code)			
14.1. UN number or ID number:	Not applicable		
14.2. UN proper shipping name:			
Not applicable	Net Proble		
14.3. Transport hazard class(es):	Not applicable		
14.4. Packing group: 14.5. Environmental hazards:	Not applicable Not applicable		
Marine Pollutant:	Not applicable		
EmS:	Not applicable		
Transport by air (IATA)			
14.1. UN number or ID number:	Not applicable		
14.2. UN proper shipping name:			
Not applicable			
14.3. Transport hazard class(es):	Not applicable		
14.4. Packing group:	Not applicable		
14.5. Environmental hazards:	Not applicable		
14.6. Special precautions for user			
Links enorified athornwise, general measures for sets transport must be			
Unless specified otherwise, general measures for safe transport must b			
14.7. Maritime transport in bulk according to IMC			
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations.	) instruments		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations.			
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Regulation	) instruments ulatory information		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Regulation	) instruments		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Reg         15.1 Safety, health and environmental regulation	) instruments ulatory information		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Reg         15.1 Safety, health and environmental regulation         Observe restrictions:	) instruments ulatory information		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Reg         15.1 Safety, health and environmental regulation	) instruments ulatory information		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Reg         15.1 Safety, health and environmental regulation         Observe restrictions:	) instruments ulatory information		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations. <b>SECTION 15: Reg 15.1 Safety, health and environmental regulation</b> Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):	<ul> <li>instruments</li> <li>ulatory information</li> <li>s/legislation specific for the substance or mixture</li> <li>~ 92 %</li> </ul>		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Reg         15.1 Safety, health and environmental regulation         Observe restrictions:         Comply with trade association/occupational health regulations.	<ul> <li>instruments</li> <li>ulatory information</li> <li>s/legislation specific for the substance or mixture</li> <li>~ 92 %</li> </ul>		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations. <b>SECTION 15: Reg 15.1 Safety, health and environmental regulation</b> Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must	<ul> <li>instruments</li> <li>ulatory information</li> <li>s/legislation specific for the substance or mixture</li> <li>~ 92 %</li> </ul>		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Reg         15.1 Safety, health and environmental regulation         Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must         15.2 Chemical safety assessment	<ul> <li>instruments</li> <li>ulatory information</li> <li>s/legislation specific for the substance or mixture</li> <li>~ 92 %</li> </ul>		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations. <b>SECTION 15: Reg 15.1 Safety, health and environmental regulation</b> Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must	<ul> <li>instruments</li> <li>ulatory information</li> <li>s/legislation specific for the substance or mixture</li> <li>~ 92 %</li> </ul>		
<ul> <li>14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.</li> <li>SECTION 15: Reg</li> <li>15.1 Safety, health and environmental regulation</li> <li>Observe restrictions: Comply with trade association/occupational health regulations.</li> <li>Directive 2010/75/EU (VOC):</li> <li>National requirements/regulations on safety and health protection must</li> <li>15.2 Chemical safety assessment A chemical safety assessment is not provided for mixtures.</li> </ul>	<ul> <li>D instruments</li> <li>ulatory information</li> <li>s/legislation specific for the substance or mixture</li> <li>~ 92 %</li> <li>the applied when using work equipment.</li> </ul>		
<ul> <li>14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.</li> <li>SECTION 15: Reg</li> <li>15.1 Safety, health and environmental regulation</li> <li>Observe restrictions: Comply with trade association/occupational health regulations.</li> <li>Directive 2010/75/EU (VOC):</li> <li>National requirements/regulations on safety and health protection must</li> <li>15.2 Chemical safety assessment A chemical safety assessment is not provided for mixtures.</li> </ul>	<ul> <li>instruments</li> <li>ulatory information</li> <li>s/legislation specific for the substance or mixture</li> <li>~ 92 %</li> </ul>		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations.         SECTION 15: Reg         15.1 Safety, health and environmental regulation         Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must         15.2 Chemical safety assessment         A chemical safety assessment is not provided for mixtures.         SECTION 16: O	D instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment.		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations. <b>SECTION 15: Reg 15.1 Safety, health and environmental regulation</b> Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must <b>15.2 Chemical safety assessment</b> A chemical safety assessment is not provided for mixtures. <b>SECTION 16: O</b> Revised sections:	<ul> <li>D instruments</li> <li>ulatory information</li> <li>s/legislation specific for the substance or mixture</li> <li>~ 92 %</li> <li>be applied when using work equipment.</li> </ul>		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations. <b>SECTION 15: Reg 15.1 Safety, health and environmental regulation</b> Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must <b>15.2 Chemical safety assessment</b> A chemical safety assessment is not provided for mixtures. <b>SECTION 16: O</b> Revised sections:         These details refer to the product as it is delivered.	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment.		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations. <b>SECTION 15: Reg 15.1 Safety, health and environmental regulation</b> Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must <b>15.2 Chemical safety assessment</b> A chemical safety assessment is not provided for mixtures. <b>SECTION 16: O</b> Revised sections:	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment.		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations. <b>SECTION 15: Reg 15.1 Safety, health and environmental regulation</b> Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must <b>15.2 Chemical safety assessment</b> A chemical safety assessment is not provided for mixtures. <b>SECTION 16: O</b> Revised sections:         These details refer to the product as it is delivered.	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment. 2 ed.		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations. SECTION 15: Reg 15.1 Safety, health and environmental regulation Observe restrictions: Comply with trade association/occupational health regulations. Directive 2010/75/EU (VOC): National requirements/regulations on safety and health protection must 15.2 Chemical safety assessment A chemical safety assessment A chemical safety assessment is not provided for mixtures. SECTION 16: O Revised sections: These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is require Classification and processes used to derive the	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment. 2 ed.		
<b>14.7. Maritime transport in bulk according to IMC</b> Non-dangerous material according to Transport Regulations. <b>SECTION 15: Reg 15.1 Safety, health and environmental regulation</b> Observe restrictions:         Comply with trade association/occupational health regulations.         Directive 2010/75/EU (VOC):         National requirements/regulations on safety and health protection must <b>15.2 Chemical safety assessment</b> A chemical safety assessment         SECTION 16: O         Revised sections:         These details refer to the product as it is delivered.         Employee instruction/training in handling hazardous materials is required	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment. 2 ed.		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations. SECTION 15: Reg 15.1 Safety, health and environmental regulation Observe restrictions: Comply with trade association/occupational health regulations. Directive 2010/75/EU (VOC): National requirements/regulations on safety and health protection must 15.2 Chemical safety assessment A chemical safety assessment A chemical safety assessment SECTION 16: O Revised sections: These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is require Classification and processes used to derive the the ordinance (EG) 1272/2008 (CLP):	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % t be applied when using work equipment. 2 ed. classification of the mixture in accordance with		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations. SECTION 15: Reg 15.1 Safety, health and environmental regulation Observe restrictions: Comply with trade association/occupational health regulations. Directive 2010/75/EU (VOC): National requirements/regulations on safety and health protection must 15.2 Chemical safety assessment A chemical safety assessment SECTION 16: CO Revised sections: These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is require Classification and processes used to derive the the ordinance (EG) 1272/2008 (CLP):	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment. 2 ed.		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations. SECTION 15: Reg 15.1 Safety, health and environmental regulation Observe restrictions: Comply with trade association/occupational health regulations. Directive 2010/75/EU (VOC): National requirements/regulations on safety and health protection must 15.2 Chemical safety assessment A chemical safety assessment A chemical safety assessment SECTION 16: O Revised sections: These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is require Classification and processes used to derive the the ordinance (EG) 1272/2008 (CLP):	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment. 2 ed. classification of the mixture in accordance with		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations. SECTION 15: Reg 15.1 Safety, health and environmental regulation Observe restrictions: Comply with trade association/occupational health regulations. Directive 2010/75/EU (VOC): National requirements/regulations on safety and health protection must 15.2 Chemical safety assessment A chemical safety assessment SECTION 16: C Revised sections: These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is require Classification and processes used to derive the the ordinance (EG) 1272/2008 (CLP):	2 instruments ulatory information s/legislation specific for the substance or mixture ~ 92 % be applied when using work equipment. 2 ed. classification of the mixture in accordance with		
14.7. Maritime transport in bulk according to IMC Non-dangerous material according to Transport Regulations. SECTION 15: Reg 15.1 Safety, health and environmental regulation Observe restrictions: Comply with trade association/occupational health regulations. Directive 2010/75/EU (VOC): National requirements/regulations on safety and health protection must 15.2 Chemical safety assessment A chemical safety assessment SECTION 16: O Revised sections: These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is require Classification and processes used to derive the the ordinance (EG) 1272/2008 (CLP): Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	D instruments   ulatory information   s/legislation specific for the substance or mixture   ~ 92 %   be applied when using work equipment.   2   ed.   classification of the mixture in accordance with   Evaluation method used		

Eye Dam. 1, H318	Classification according to calculation procedure.
Asp. Tox. 1, H304	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation.



Page 12 of 13 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute

œ

H318 Causes serious eye damage. EUH066 Repeated exposure may cause skin dryness or cracking.

Eye Dam. — Serious eye damage Asp. Tox. — Aspiration hazard Skin Irrit. — Skin irritation

#### Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

#### Any abbreviations and acronyms used in this document:

acc., acc. to according, according to					
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the					
nternational Carriage of Dangerous Goods by Road)					
AOX Adsorbable organic halogen compounds					
approx. approximately					
Art., Art. no. Article number					
ASTM ASTM International (American Society for Testing and Materials)					
ATE Acute Toxicity Estimate					
BAM Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany)					
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)					
BCF Bioconcentration factor					
BSEF The International Bromine Council					
CAS Chemical Abstracts Service					
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances					
and mixtures)					
CMR carcinogenic, mutagenic, reproductive toxic					
DMEL Derived Minimum Effect Level					
DNEL Derived No Effect Level					
OC Dissolved organic carbon					
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance					
EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)					
EC European Community					
ECHA European Chemicals Agency					
ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect					
EEC European Economic Community					
EINECS European Inventory of Existing Commercial Chemical Substances					
ELINCS European List of Notified Chemical Substances					
EN European Norms					
EPA United States Environmental Protection Agency (United States of America)					
ErCx, EµCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)					
etc. et cetera					
EU European Union					
/AL Ethylene-vinyl alcohol copolymer					
Fax. Fax number					
gen. general					
GHS Globally Harmonized System of Classification and Labelling of Chemicals					
GWP Global warming potential					
Koc Adsorption coefficient of organic carbon in the soil					
Kow octanol-water partition coefficient					



Page 13 of 13 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878) Revision date / version: 18.09.2022 / 0025 Replacing version dated / version: 01.11.2021 / 0024 Valid from: 18.09.2022 PDF print date: 24.09.2024 Blei-Ersatz Lead Substitute International Agency for Research on Cancer IARC IATA International Air Transport Association IBC (Code) International Bulk Chemical (Code) IMDG-code International Maritime Code for Dangerous Goods including, inclusive incl. IUCLID International Uniform Chemical Information Database IUPAC International Union for Pure Applied Chemistry LC50 Lethal Concentration to 50 % of a test population LD50 Lethal Dose to 50% of a test population (Median Lethal Dose) Logarithm of adsorption coefficient of organic carbon in the soil Log Koc Log Kow, Log Pow Logarithm of octanol-water partition coefficient LQ Limited Quantities MARPOL International Convention for the Prevention of Marine Pollution from Ships mg/kg body weight mg/kg bw mg/kg bw/d, mg/kg bw/day mg/kg body weight/day mg/kg dw mg/kg dry weight mg/kg wwt mg/kg wet weight not applicable n.a. not available n.av. not checked n.c. n.d.a. no data available NIOSH National Institute for Occupational Safety and Health (USA) No-longer-Polymer NI P NOEC, NOEL No Observed Effect Concentration/Level OECD Organisation for Economic Co-operation and Development org. organic OSHA Occupational Safety and Health Administration (USA) PBT persistent, bioaccumulative and toxic PΕ Polyethylene PNEC Predicted No Effect Concentration parts per million ppm PVC Polvvinvlchloride REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals) 6/7/8/9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical REACH-IT List-No. identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT. RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail) SVHC Substances of Very High Concern Telephone Tel. TOC Total organic carbon UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VOC Volatile organic compounds vPvB very persistent and very bioaccumulative The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

ആ

# Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.