

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 1

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Red Lead, Minium

Article No.: 42500

UFI: --

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

*Use of lead metal in lead oxide production under industrial conditions.
Use of lead oxides in lead stabilizer production under industrial conditions.
Use in lead oxides in lead acid battery production.
Use of lead oxides in crystal glass production.
Use of lead oxides in production of ceramic ware.
Use of lead oxides in rubber production.
Use of lead oxides in explosive manufacture.
Professional use of adsorbents.
Professional use of lead monoxide as laboratory reagents in chemical analysis
Professional use of batteries
Professional use of rubber protection and lead monoxide stabilized rubber
Consumer use of batteries*

Uses advised against:

No specific uses advised against have been identified, other than legal restrictions on the use of lead.

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.com

E-Mail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

*Acute toxicity (oral), hazard category 4
Acute toxicity (inhalation), hazard category 4
Carcinogenicity, hazard category 2
Reproductive toxicity, hazard category 1A
May cause harm to breast-fed children
Specific target organ toxicity (repeated exposure), hazard category
Chronic aquatic toxicity, hazard category 1*

next page: 2

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 2

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

H302	Harmful if swallowed.
Cat.: 4	
H332	Harmful if inhaled.
Cat.: 4	
H351	Suspected of causing cancer.
Cat.: 2	
H360Df	May damage the unborn child. Suspected of damaging fertility.
Cat.: 1A	
H362	May cause harm to breast-fed children.
Cat.:	
H372	Causes damage to organs through prolonged or repeated exposure.
Cat.: 1	
H410	Very toxic to aquatic life with long lasting effects.
Cat.: 1	

Possible Environmental Effects:

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

Hazard designation:



GHS07



GHS08-2



GHS09

Signal word:

Danger

Hazard designation:

H302	Harmful if swallowed.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H362	May cause harm to breast-fed children.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Safety designation:

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P263	Avoid contact during pregnancy and while nursing.
P264	Wash thoroughly after handling.
	Avoid release to the environment.

next page: 3

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 3

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

P273

P280

P391

Wear protective gloves/ clothing/ eye/ face protection.

Collect spillage

Hazardous components for labelling:

2.3. Other Hazards

This product requires tactile warnings if supplied to the general public. This product requires child resistant fastenings if supplied to the general public.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization:

Pb3O4, C.I. Pigment Red 105

Information on Components / Hazardous Ingredients:

Lead(II,IV) oxide (H302-332-351-360Df-362-372-400-410; M-Factor: 10); REACH Reg. No. 01-2119517589-27-0001

100 %

CAS-Nr: 1314-41-6

EINECS-Nr: 215-235-6

EC-Nr: 082-001-00-6

Additional information:

Substance of very High Concern (SVHC)

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Seek medical attention in case of complaints.

Show this safety data sheet to the doctor in attendance.

Self-protection of the first-aider:

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. See Section 8 for more information.

After inhalation:

Give artificial respiration in case breathing is not regular or if it has stopped.

Supply fresh air. Consult physician if symptoms persist.

After skin contact:

Remove contaminated clothing. Wash off immediately with plenty of water and soap.

If symptoms persist, consult a physician.

After eye contact:

Remove contact lenses, if present and easy to do. Continue rinsing.

Keep eye wide open while rinsing.

Rinse open eyes immediately with plenty of water for at least 15 minutes. Call a physician.

After ingestion:

next page: 4

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 4

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

*Do not induce vomiting.
Rinse mouth with plenty of water.
Never give anything by mouth to an unconscious person.
Consult physician.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

Coughing and/or weezing, breathing difficulties.

Effects of Exposure:

May cause cancer. May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility. Causes damage to organs through prolonged or repeated exposure.

Effects:

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Treat symptomatically.

Intoxication symptoms may occur after several hours, therefore a 48 hour medical observation is necessary.

In case of ingestion, induced vomiting or application of laxatives may be appropriate; treat as for lead poisoning.

There needs to be regular blood monitoring to confirm exposure controls are adequate.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

CO2, extinguishing powder, water jet.

Fight larger fire with alcohol resistant foam.

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

Never apply a strong water jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

Product is not flammable.

In case of fire: release of hazardous combustion gases, including lead fumes.

5.3. Advice for Firefighters

Protective equipment:

Wear positive pressure self-contained breathing apparatus (SCBA).

Wear suitable protective clothing.

Further information:

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid inhalation of dust.

next page: 5

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 5

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

*Wear appropriate protective equipment. Keep spectators away.
Ensure adequate ventilation.*

6.2. Environmental Precautions

Environmental precautions:

*Prevent contamination of soils, drains and surface water.
Contact local authorities if product pollutes soil or vegetation.*

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

*Provide adequate ventilation.
Take up mechanically and collect in suitable labelled containers for disposal.
This product and its container must be disposed as hazardous waste.*

6.4. Reference to other Sections

*Dispose of contaminated material according to Section 13.
Protective clothing, see Section 8.*

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

*Provide good ventilation and/or exhaust at the workplace. Ensure adequate ventilation. Handle and open container with care.
Avoid formation of dust. Do not inhale dust.*

Hygienic measures:

*Do not eat or drink during work. Do not smoke.
Not to be used by pregnant workers and workers who have recently given birth or who are breastfeeding.
Contaminated work clothing should not be allowed out of the workplace. Change work clothing daily before leaving workplace.*

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

*Store in tightly sealed containers in a dry room.
Store in roofed places at room temperature. Only for professional users.
Keep product away from children.*

Requirements for storage areas and containers:

*Keep container tightly closed.
This product is controlled under the Seveso Directive. E1 Lower class 100 tons, upper class 200 tons.*

Information on fire and explosion protection:

*Do not store together with: foodstuffs and animal feed.
Product is not combustible.*

Storage class:

Further Information:

next page: 6

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 6

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

7.3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

Lead and its compounds: 0.1 mg/m³ (8h)

Parameters to be controlled:

Lead and its compounds: 0.15 mg/m³ (UK, Control of Lead at Work Regulations (CLAW 2002); BE; HU; ES; IT)

Lead and its compounds: 0.1 mg/m³ (AT; FR; CH)

Derived No-Effect Level (DNEL):

Lead, inorganic:

Developmental effect on foetus of pregnant women: 10 µg/dl (long-term exposure - systemic effects)

Predicted No-Effect Concentration (PNEC):

Fresh water: 2.4 µg/l

Sea water: 3.3 µg/l

Fresh water sediment: 186 mg/kg

Sea water sediment: 168 mg/kg

Soil: 212 mg/kg

Sewage treatment system (STP): 100 µg/l

Additional Information:

Lead, inorganic:

Biological limits: EU: 700 µg/l; DE: 400 µg/l, 300 µg/l (women below 45 years); GB: 600 µg/l, 300 µg/l (women of childbearing age); FR: 400 µg/l, 300 µg/l (women of childbearing age).

8.2. Exposure Controls

Technical protective measures:

Use appropriate local exhaust ventilation to control airborne levels.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Wash contaminated clothes before reuse.

Avoid contact with skin, eyes and clothing.

Blood level monitoring: Set in place a certified regime which covers all site activities. Workers must be submitted to regular blood lead monitoring, including increased frequency for workers undertaking high-risk jobs and workers with elevated blood lead levels. Ensure all workers have a blood test prior to working on site.

Set an "action level" that is typically 5 µg/dL below the exposure limit deemed to be safe. If the action level is exceeded, appropriate measures are to be taken, to prevent further increases in blood lead.

If the safe threshold is exceeded, continue or begin ban on

next page: 7

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 7

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

overtime, ensure strict hygiene procedures are followed, undertake detailed inspections to ensure correct use of personal equipment, undertake detailed inspections to ensure recommended workplace procedures are followed.

Move employee to workplace where exposure is expected to be lower or remove from lead environment altogether, further increase blood lead sampling frequency, and continue frequent sampling until results are below the first action level.

Respiratory protection:

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Wear a respirator fitted with the following cartridge: Particle filter, type P2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Check that the respirator fits tightly and the filter is changed regularly.

Hand protection:

Protective gloves (EN 374)

Protective glove material:

Neoprene, leather

For short-term exposure: nitrile rubber (> 480 min, 0.11 mm).

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

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

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

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

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

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

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

next page: 8

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 8

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>red</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>no information available</i>
<i>pH-Value:</i>	<i>7 - 9</i>
<i>Melting temperature:</i>	<i>> 550°C</i>
<i>Boiling temperature:</i>	<i>> 550°C</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	<i>non-combustible</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>can be neglected</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>9.1 g/cm³ (20°C)</i>
<i>Solubility in water:</i>	<i>67.3 mg/l H₂O (20°C)</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not determined</i>
<i>Auto-ignition temperature:</i>	<i>not applicable</i>
<i>Decomposition temperature:</i>	<i>> 550°C</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>
<i>Explosive properties:</i>	<i>Product does not present an explosion hazard.</i>
<i>Oxidizing properties:</i>	<i>not oxidizing</i>
<i>Bulk density:</i>	<i>1200 - 3500 kg/m³</i>

9.2. Further Information

Solubility in solvents:

next page: 9

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 9

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

0.07 mol/l HCl: 100 %

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size: 2.5 - 10 µm

Other information:

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

None if used according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid excessive heat for prolonged periods of time.

Thermal decomposition:

10.5. Incompatible Materials

Strong oxidizing agents.

10.6. Hazardous Decomposition Products

None if handled according to specifications.

10.7. Further Information

11. Toxicological Information

11.1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

The toxicity of this substance has been assessed using test data on lead monoxide and also using read-across from studies with similar inorganic lead compounds.

LD50, oral:

*> 10000 mg/kg
ATE oral: 500 mg/kg*

LD50, dermal:

> 2000 mg/kg (rat)

LC50, inhalation:

*> 5.05 mg/l (rat)
ATE Inhalation (dusts/mists): 1.5 mg/l*

Sparingly soluble inorganic lead compounds have generally been found to be of relatively low acute toxicity by ingestion, in contact with skin and by inhalation. Nevertheless current EC regulations require this substance to be classified as harmful by ingestion and inhalation.

Primary effects

Irritant effect on skin:

Non irritating (rabbit)

next page: 10

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 10

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

<i>Irritant effect on eyes:</i>	<p><i>Animal data:</i> <i>Dosage: 0.5 g, 4h (rabbit; Reach dossier information). Based on the available data the classification criteria are not met.</i></p> <p><i>Non-irritating to eyes (rabbit)</i></p> <p><i>Animal data:</i> <i>Dosage: 0.1 g, 72h (rabbit; Reach dossier information). Based on the available data the classification criteria are not met.</i></p>
<i>Inhalation:</i>	<p><i>No information available.</i></p>
<i>Ingestion:</i>	<p><i>No information available</i></p>
<i>Sensitization:</i>	<p><i>No sensitizing effects known.</i> <i>Guinea pig maximization test (GPMT) - Guinea pig: not sensitizing</i></p>
<i>Mutagenicity:</i>	<p><i>The evidence for genotoxic effects of highly soluble inorganic lead compounds is contradictory, with numerous studies reporting both positive and negative effects. Responses appear to be induced by indirect mechanisms, mostly at very high concentrations that lack physiological relevance.</i></p>
<i>Reproductive toxicity:</i>	<p><i>Developmental toxicity: LOEL: 0.05 %, Oral (rat, Reach dossier information)</i> <i>Suspected of damaging the unborn child. Post-natal exposure of children to inorganic lead compounds is associated with adverse effects on neurobehavioural development.</i></p>
<i>Carcinogenicity:</i>	<p><i>An inhalation study of lead monoxide in rats showed that it did not induce, initiate or promote tumors of the lung. However, there is evidence that soluble lead compounds may have a carcinogenic effect, particularly on the kidneys of rats. However, the mechanisms by which this effect occurs are still unclear.</i> <i>Epidemiology studies of workers exposed to inorganic lead compounds have found a limited association with stomach cancer. This has led to the classification by IARC than inorganic lead compounds are probably carcinogenic to humans (Group 2A).</i> <i>IARC: Group 2A: Probably carcinogenic to humans.</i></p>
<i>Teratogenicity:</i>	<p><i>Suspected of damaging fertility.</i></p>
<i>Specific target organ toxicity (STOT):</i>	<p><i>Single exposure: no organospecific toxicity expected.</i> <i>Repeated exposure: Lead monoxide is a cumulative poison and may be absorbed into the body through ingestion or inhalation. Inorganic lead compounds have been documented in observational human studies to produce toxicity in multiple organ systems and body function including the haemtopoetic (blood) system, kidney function, reproductive function and the central nervous system.</i></p>

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 11

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

Aspiration hazard:

Lead monoxide is a solid and aspiration hazards are not expected to occur.

11.2. Information on other Hazards

Endocrine Disrupting Properties: no information available.

Toxicokinetics:

Inorganic lead compounds are slowly absorbed by ingestion and inhalation and poorly absorbed through the skin. If absorbed, lead will accumulate in the body with low rates of excretion, leading to long-term build up. Part of risk management is to take blood samples from workers for analysis to ensure that exposure levels are acceptable.

Route of entry: ingestion, inhalation, skin and/or eye contact.

Target organs: Blood system, central nervous system, kidneys, reproductive organs.

12. Ecological Information

12.1. Aquatic Toxicity

The following acute Ecotoxicity Reference Values (ERV) were used to determine the classification of lead monoxide: pH 6: 79.4 µg/l; pH 7: 40.6 µg/l; pH 8: 22.0 µg/l

The following chronic Ecotoxicity Reference Values (ERV) were used to determine the classification of lead monoxide: pH 6: 19.2 µg/l; pH 7: 9.7 µg/l; pH 8: 6.6 µg/l

Fish toxicity:

Acute aquatic toxicity:

LC50: 0.01 - 0.1 (96h); M-Factor (acute): 10

LC50 (pH 5.5-6.5): 0.04 - 0.81 mg/l (96h; *Pimephales promelas*, *Oncorhynchus mykiss*)

LC50 (pH 6.5-7.5): 0.052 - 3.598 mg/l (96h; *Pimephales promelas*, *Oncorhynchus mykiss*)

LC50 (pH 7.5-8.5): 0.113 - 3.249 mg/l (96h; *Pimephales promelas*, *Oncorhynchus mykiss*)

Chronic aquatic toxicity (NOEC):

NOEC: 0.01 - 0.1; M-Factor (chronic): 1

EC10: 0.0178 - 1.558 mg/l (*Oncorhynchus mykiss*, *Pimephales promelas*, *Lepomis macrochirus*)

EC10: 0.229 - 0.437 mg/l (*Cyprinodon variegatus*)

Daphnia toxicity:

Acute toxicity:

LC50 (pH 5.5-6.5): 0.073 - 0.655 mg/l (48h; *Daphnia magna*, *Ceriodaphnia dubia*)

LC50 (pH 6.5-7.5): 0.028 - 1.179 mg/l (48h; *Daphnia magna*, *Ceriodaphnia dubia*)

LC50 (pH 7.5-8.5): 0.026 - 3.115 mg/l (48h; *Daphnia magna*, *Ceriodaphnia dubia*)

Chronic aquatic toxicity (NOEC):

Freshwater invertebrates: NOEC (EC10): 0.0017 - 0.963 mg/l (*Daphnia magna*, *Hyalella azteca*, *Lymnaea palustris*,

Ceriodaphnia dubia, *Lymnaea stagnalis*, *Philodina rapida*, *Alona rectangular*, *Diaphanosoma birgei*, *Chironomus tentans*,

Branchionus calyciflorus, *Chironomus riparius*, *Baetis tricaudatus*)

next page: 12

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 12

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

Marine water invertebrates: NOEC (EC10): 0.0092 - 1.409 mg/l (Mytilus trossulus, Americamysis bahia, Mytilus galloprovincialis, Neanthes arenaceoedentata, Stronglyocentrotus purpuratus, Paracentrotus lividus, Dendraster excentricus, Tisbe battagliai, Crassostrea gigas)

Freshwater sediment: NOEC (EC10): 573 - 3.390 mg/kg (Tubifex tubifex, Ephoron virgo, Hyalella azteca, Gammarus pulex, Lumbriculus variegatus, Hexagenia limbata, Chironomus tentans)

Marine water sediment: NOEC (EC10): 680 - 1.291 mg/kg (Neanthes arenaceoedentata, Leptocheirus plumulosus)

Bacteria toxicity:

EC10 (NOEC): 1.06 - 2.92 mg/l (Respiration); 2.79 - 9.59 mg/l (Ammonia uptake rate); 1.0 - 7.0 mg/l (Mortality)

Chronic toxicity (NOEC):

Microorganisms, EC10: 97 - 7880 mg/l (Denitrification, N-mineralization, nitrification, basal respiration, substrate-induced respiration)

Toxicity to terrestrial invertebrates, EC10: 34 - 2445 mg/kg (Folsomia candida, Proisotoma minuta, Sinella curviseta, Eisenia fetida, Eisenia andrei, Dendrobaena rubida, Lumbricus rubellus, Aporectodea caliginosa)

Toxicity to terrestrial plants, EC10: 57 - 6774 mg/kg (Hordeum vulgare, Zeo mays, Echinochloa crus-galli, Lolium perenne, Sorghum bicolor, Triticum aestivum, Oryza sativa, Avena sativa, Rephanus sativus, Lycopersicon esculentum, Lactuca sativa, Cucumis sativus, Picea rubens, Pinus taeda)

Algae toxicity:

ErC50 (pH 5.5-6.5): 0.072 - 0.388 mg/l (72h; Pseudokirchneriella subcapitata, Chlorella kesslerii)

ErC50 (pH 6.5-7.5): 0.026 - 0.079 mg/l (72h; Pseudokirchneriella subcapitata, Chlorella kesslerii)

ErC50 (pH 7.5-8.5): 0.020 - 0.049 mg/l (72h; Pseudokirchneriella subcapitata, Chlorella kesslerii)

Freshwater plants, NOEC (EC10): 0.0061 - 1.190 mg/l (Pseudokirchneriella subcapitata), 0.085 - 1.025 mg/l (Lemna minor)

Marine water plants, NOEC (EC10): 0.0529 - 1.234 mg/l (Skeletonema costatum), 0.0119 mg/l (Champia parvula)

12. 2. Persistency and Degradability

Lead is naturally occurring and ubiquitous in the environment. Lead is obviously persistent in the sense that they do not depend to CO₂, water, and other elements of less environmental concern. In the water compartment, lead is rapidly and strongly bound to the suspended solids of the water column.

12. 3. Bioaccumulation

Bioaccumulation potential (BAF): 1.552 l/kg; Fish: 0.10 kg/kg; Soil: not likely

12. 4. Mobility

Slightly soluble in water.

Adsorption/Soil: log Kd 5.2 (fresh water sediment); log Kd 5.7 (marine sediment); log Kd 3.8 (soil)

12. 5. Results of PBT- und vPvP Assessment

Inorganic substance: does not comply with the criteria for the next page: 13

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 13

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

classification as PBT or vPvB.

12. 6. Endocrine Disrupting Properties

This product does not contain components considered to have endocrine disrupting properties.

12. 7. Other Adverse Effects

Water hazard class:

3, hazardous

Do not let product contaminate ground water, waterways or sewage system.

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Do not allow product to leak into the sewage system, waters or soil. This material and its container must be disposed of in a safe way.

Dispose according to the waste disposal guidelines 2008/98/EC.

European Waste Code (EWC):

060313 - Solid salts and solutions containing heavy metals.

060405 - Wastes containing other heavy metals.

060315 - Metal oxides containing heavy metals.

Uncleaned packaging:

Contaminated packaging must be disposed like the substance.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA 2291

14. 2. UN Proper Shipping Name

ADR/RID: BLEIVERBINDUNG, LÖSLICH, N.A.G. (Bleitetraoxid)

IMDG/IATA: LEAD COMPOUND, SOLUBLE, N.O.S. (Trilead Tetraoxide)

14. 3. Transport Hazard Classes

ADR Class: 6.1

Hazard no.: 6.1

Classification code: T5

Tunnel restriction code: E

IMDG Class (sea): 6.1

Hazard no.: 6.1

EmS No.: F-A, S-A

next page: 14

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 14

Revised edition: 22.04.2022

Version: 3

Printed: 20.09.2023

	<i>IATA Class:</i>	6.1
	<i>Hazard no.:</i>	6.1
14. 4.	Packaging Group	
	<i>ADR/RID:</i>	III
	<i>IMDG:</i>	III
	<i>IATA:</i>	III
14. 5.	Environmental Hazards	<i>Labelling according 5.2.1.8 ADR/RID: fish and tree Labelling according 5.2.1.6.3 IMDG: fish and tree Labelled with "P" according 2.10 IMDG: yes</i>
14. 6.	Special Precautions for User	<i>IMDG Code Segregation 7. Heavy metals and their salts, 9. Lead and its compounds</i>
14. 7.	Maritime Transport in Bulk according to IMO Instruments	<i>not applicable</i>
14. 8.	Further Information	
15.	Regulatory Information	
15. 1.	Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture	
	<i>Water hazard class:</i>	<i>3, very hazardous for water (German Regulation)</i>
	<i>Local regulations on chemical accidents:</i>	<i>Seveso-III Directive (2012/18/EU): Category E1: Hazardous to the aquatic environment Amount 1: 100 t; Amount 2: 200 t</i>
	<i>Employment restrictions:</i>	<i>The employment restrictions for young workers in accordance with the Youth Employment Protection Law are to be observed. The employment restrictions for expectant and nursing mothers in accordance with the Maternity Protection Guideline are to be observed.</i>
	<i>Restriction and prohibition of application:</i>	<i>Restricted to professional users (TRSG 200, No. 6.9).</i>
	<i>Technical instructions on air quality:</i>	<i>5.2.2 (II)</i>
15. 2.	Chemical Safety Assessment	<i>A Chemical Safety Assessment has been carried out for this product.</i>
15. 3.	Further Information	<i>Contains lead, do not use for paint of objects which could be licked or chewed by children. Danger of cumulative effect (when the content of lead is > 1 %). EC. Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Regulation (EPER): Lead and its compounds Regulation (EC) 1005/2009 - Substances that Deplete the Ozone</i>

next page: 15

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



42500 Red Lead, Minium

Page 15

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Layer: not regulated / not applicable

National Regulations (France):

Lead oxide (CAS 1317-36-8): French RG-Number: RG 1

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.