

46003 Lead White, historical

Edition: 27.01.2006

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Information:

Product Name: Lead White, historical, about 1950
Article No.: 46003
Application: Artists' and Restauration Material

Company: Kremer Pigmente GmbH & Co. KG
Hauptstrasse 41-47, D - 88317 Aichstetten
Tel. +49 7565 91120 Fax. +49 7565 1606
www.kremer-pigmente.de, kremer-pigmente@t-online.de

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Lead hydroxide carbonate, basic lead carbonate $2\text{PbCO}_3 \cdot \text{Pb}(\text{OH})_2$, C.I.Pigment White Lead No.1

Hazardous Components:

Component	CAS No.	EC No.	INDEX No.	Hazard Symbol	Risk Phrases
Lead hydroxide carbonate	1319-46-6	215-290-7	082-001-006	T, N	20/22, 33, 50/53, 61, 62

3. HAZARDS IDENTIFICATION

Classification:

Repr. Cat. 3; R62 May harm reproduction ability.
Repr. Cat. 1; R61 May damage foetus.
Xn; R20/22 Toxic when inhaled and ingested.
N; R50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R 33 Danger of cumulative effects.

Hazard symbols:



T Toxic



N Environmentally harmful

Risk Phrases:

R 20/22: Toxic when inhaled and ingested.
R 33: Danger of cumulative effects.
R 50/53: Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R 61: May damage foetus.
R 62: May harm reproduction ability.

4. FIRST AID MEASURES

General information: In case of complaints consult physician. Remove contaminated clothing and shoes; wash thoroughly before reuse.
After inhalation: Remove affected persons from danger area and provide fresh air.
After skin contact: Wash immediately with soap and water.
After eye contact: Thoroughly rinse open eye for at least 15 minutes. Consult physician.
After ingestion: Rinse mouth and give plenty of water to drink. Get medical advice/help immediately. Never give anything to unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray jet, dry agent, foam, carbon dioxide.
Special hazards: In case of fire: release of lead oxide and other lead compounds.
Personal protection: Wear self-contained breathing apparatus and full protective gear.
Further details: Product itself is not combustible - suitable extinguishing media for surroundings.

6. ACCIDENTAL RELEASE MEASURES

Personal precaution: Avoid dust formation, wear protective clothing, keep unprotected persons away from product. Provide adequate ventilation.
Environmental precautions: Do not allow to enter drains or waterways - dispose of contaminated water / fire fighting water properly.
Methods for cleaning up / taking up: Clean up mechanically and dispose according to specifications.

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7. HANDLING AND STORAGE

Handling:

Advice on safe handling: Avoid formation and deposition of dust - provide good ventilation when handling/working with product.

Advice on fire and explosion protection: The product is not combustible.

Storage:

Storage conditions: Store product in roofed room at room temperature. Protect from direct sunlight and humidity. Keep containers tightly sealed - do not store together with foodstuff.

Storage class: 6.1 B, non-combustible toxic products

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contents and Limits:

Trilead bis(carbonate) dihydroxide

MAC (TRGS), Metal 0,1 E mg/m³

98/24/EG, Metal 0,15 mg/m³

Pregnancy group B

Personal Protection:

Respiratory protection: Dust mask, particle filter P 2 (for solid and liquid particles, DIN 3181)

Hand protection: Protective gloves.

Eye protection: Safety goggles.

Body protection: Chemical protective gear

General Protection and Hygiene:

Keep away from foodstuff, drinks. Do not drink, eat, smoke, snuff while handling or working with product. Wash hands and/or face before breaks and after handling product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: powder

Color: white

Odor: without

Changes in physical state:

Thermal decomposition: approx. 315°C

Vapour Pressure: not applicable

Density 6.9 g/cm³ (20°C) DIN/ISO 787, 10

Solubility: soluble in acids and alkaline solutions

Solubility in water insoluble (at 20°C)

pH-Value: 7 (100 g/l H₂O, 20°C) DIN/ISO 787, 9

Further information: Product is not combustible and not explosive.

10. STABILITY AND REACTIVITY

Hazardous decomposition products: Lead oxide

Thermal decomposition: None if handled and stored appropriately.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

LD/LC50-values: basic lead carbonate, oral > 10.000 mg/kg (rat)

Primary Effects:

- skin: non-irritant (rabbit)

- eye: non-irritant (rabbit eye)

Additional Toxicological Information:

Chronic Toxicity:

Lead pigments are heavy soluble lead compounds, however, lead particles solve in hydrochloric acid in gastric fluids concentration and may accumulate in the body. Prolonged over-exposure to lead compounds may interfere with the biosynthesis of haemoglobin, etc.

12. ECOLOGICAL INFORMATION

Elimination: Heavy water-soluble, inorganic product. May almost be separated mechanically in sewage plants. Lead can be solved in acid or alkaline environment. Elimination from water by chemical flocculation necessary. The product contains lead - avoid entering into ecosystem - special pre-treatment is necessary.

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13. DISPOSAL CONSIDERATIONS

In accordance with current regulations, product has to be taken to a special waste disposal site, after consultation with site operator and/or with the responsible authority. Product may not be burned.

Waste Disposal Code: 060315, Metal oxides containing heavy metals

Soiled packaging material: Waste disposal code: 150110; packaging material containing remains of hazardous products

14. TRANSPORT INFORMATION

Land transportation:

ADR/RID-GGVS/E-Class:	6.1	UN-No.:	2291
Packaging group:	III	Label:	6.1
Classification code:	T5	Tunnel code:	E
Correct technical name:	LEAD COMPOUND, SOLUBLE, N.O.S. (Tri-lead bis(carbonate)dihydroxide)		

Sea transportation:

IMDG/GGVSea-Class:	6.1	UN No.:	2291
Packaging group:	III	EmS-No.:	6.1-04
Marine pollutant:	P		
Correct technical name:	LEAD COMPOUND, SOLUBLE, N.O.S. (Tri-lead bis(carbonate)dihydroxide)		

Air transportation:

ICAO/IATA-Class:	6.1	UN No.:	2291
Packaging group:	III	Hazard label:	6.1
Correct technical name:	LEAD COMPOUND, SOLUBLE, N.O.S. (Tri-lead bis(carbonate)dihydroxide)		

15. REGULATORY INFORMATION

Labelling in accordance with EC Regulations:

Hazard symbols:



T Toxic



N Environmentally harmful

Risk Phrases:

R 20/22: Toxic when inhaled and ingested.
R 33: Danger of cumulative effects.
R 50/53: Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R 61: May damage foetus.
R 62: May harm reproduction ability.

Safety Phrases:

S 45: In case of accident or if you feel unwell, seek medical advice (show the label where possible).
S 53: Avoid exposure - obtain special instructions before use.
S 60: This material and/or its container must be disposed of as hazardous waste.
S 61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

The total lead content is 81 %. When labelling preparations, a lead compound content of > 0.5 % must be considered and mentioned. A lead content of > 0.15 % has to be labelled: "Contains lead, do not use for paint of objects which could be licked or chewed by children.

Application Restriction:

According to para. 9, 10 of the second decree to the alteration of EC Regulations of 23 April 1990, this product may not be distributed/used for paint - **exception:** Restoration of art works as well as historically protected buildings, only if the use of substitutes is impossible.

National regulations:

Pregnancy category: B (TRGS 505, TRGS 900, Germany)
Water hazard class: 1 - slightly toxic
Air hazard: Cat. III, 81 % (Pb)

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16. FURTHER INFORMATION

This information, which describes our product with regard to possible safety requirements, is based on the present state of our knowledge and experience. It is given in good faith but no warranty expressed or implied with respect to the quality and properties of our product is made.