Michael Harding Art Materials Ltd

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 2.0 Revision Date 22.01.2015

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

	Product name	 Lead(II) carbonate Used in Foundation White (225), Cremnitz White/Walnut (307), Cremnitz White/Linseed (308), Stack Lead White (607) 				
	Product Numbers Brand Index-No. CAS-No.	 225, 307, 308, 607 Michael Harding's Artist Oil Colours 082-001-00-6 598-63-0 				
1.2	Relevant identified uses of the substance or mixture and uses advised against					
	Identified uses	 Manufacturer of artist oil paints Shall not be used as substances and a constituent of preparations intended for use as paints, except for the restoration and maintenance of works of art and historic buildings and their interiors, where Member States wish to permit this on their territory, in accordance with the provisions of ILO Convention 13 on the use of white lead and sulphates of lead in paint. 				
1.3	Details of the supplier of Company	the safety data sheet : Michael Harding Art Materials Ltd. 36 Springvale Industrial Estate Cwmbran NP44 5BD UNITED KINGDOM				
	Telephone Fax E-mail address	 +44 (0)1633 484700 +44 (0)1633 484477 oilpaint@michaelharding.co.uk 				
1.4	Emergency telephone numbers					
	Emergency Phone #s	+44 (0)1633 484700				
		+44 (0) 7748691437				
		+001 978 549 4029				

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Reproductive toxicity (Category 1A) Acute toxicity, Inhalation (Category 4) Acute toxicity, Oral (Category 4) Specific target organ toxicity - repeated exposure (Category 2) Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

May cause harm to the unborn child. Possible risk of impaired fertility. Harmful by inhalation and if swallowed. Danger of cumulative effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram				
Signal word	Danger			
Hazard statement(s) H302 H360 H373 H410	Harmful if swallowed. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.			
Precautionary statement(s) P308 + P313 P501	IF exposed or concerned: Get medical advice/ attention. Dispose of contents/ container to an approved waste disposal plant.			
Supplemental Hazard Statements	None			
Restricted to professional users	S.			
According to European Directive Hazard symbol(s)	e 67/548/EEC as amended.			
R-phrase(s) R20/22 R33 R50/53 R61 R62 S-phrase(s)	Also harmful by inhalation and if swallowed. Danger of cumulative effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause harm to the unborn child. Possible risk of impaired fertility.			
S53 S45	Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice			

S60

Restricted to professional users.

2.3 Other hazards – none

3. COMPOSITION/INFORMATION ON INGREDIENTS

waste.

3.1 Substances

Formula	:	CO ₃ Pb
Molecular Weight	:	267.21 g/mol

Component	Concentration	
Lead(II) carbonate		
CAS-No.	598-63-0	-
EC-No.	209-943-4	
Index-No.	082-001-00-6	

immediately (show the label where possible).

This material and its container must be disposed of as hazardous

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Lead salts have been reported to cross the placenta and to induce embryo- and feto- mortality. They also have teratogenic effect in some animal species. No teratogenic effects have been reported with exposure to organometallic lead compounds. Adverse effects of lead on human reproduction, embryonic and fetal development, and postnatal (e.g., mental) development have been reported. Excessive exposure can affect blood, nervous, and digestive systems. The synthesis of hemoglobin is inhibited and results in anemia. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result. Additional symptoms of overexposure include: joint and muscle pain, weakness of the extensor muscles (frequently the hand and wrist), headache, dizziness, abdominal pain, diarrhea, constipation, nausea, vomiting, blue line on the gums, insomnia, and metallic taste. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed No data available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture Cobalt/cobalt oxides, Lead oxides.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

5.4 Further information No data available.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment such as non-porous nitrile gloves and as needed Tyvek coveralls. Avoid breathing vapors. Ensure adequate ventilation. Evacuate personnel to safe areas.
- 6.2 Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- 6.3 Methods and materials for containment and cleaning up Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Provide appropriate exhaust ventilation. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

No data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control	Basis
			parameters	
Lead(II) carbonate	598-63-0	TWA	0.15 mg/m3	Europe. Chemical Agents Directive - Annex I: Binding occupational exposure limit values
	Remarks	Binding		

Biological occupational exposure limits

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
Lead(II) carbonate	598-63-0	Lead	0.7 mg/l	Blood	Chemical Agents Directive - Annex II: Binding biological limit values
	Remarks	limit valuesBiological monitoring must include measuring the blood-lead level(PbB) using absorption spectrometry or a method giving equivalentresults., Medical surveillance is carried out if: - exposure to aconcentration of lead in air is greater than 0,075 mg/m3, calculatedas a time-weighted average over 40 hours per week, or - a blood-lead level greater than 40 μg Pb/100 ml blood is measured inindividual workers. Practical guidelines for biological monitoringand medical surveillance must be developed in accordance witharticle 12, paragraph 2. These include recommendations ofbiological indicators (e.g. ALAU, ZPP, ALAD) and biological			

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good hygiene and safety practice. Wash hands before eating and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with non-porous nitrile gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash protection Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must

be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the substance at the specific workplace.

Respiratory Protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties Form: pastv a) Appearance Colour: white b) Odour No data available c) Odour Threshold No data available No data available d) pH e) Melting point/freezing point Melting point/range: 400 °C No data available f) Initial boiling point and boiling range g) Flash point No data available h) Evaporation rate No data available i) Flammability (solid, gas) no data available No data available j) Upper/lower flammability or explosive limits No data available k) Vapour pressure No data available I) Vapour density No data available m) Relative density 3.5 g/cm3 n) Water solubility emulsion o) Partition coefficient: n- octanol/water No data available p) Auto-ignition temperature No data available q) Decomposition temperature No data available r) Viscosity No data available s) Explosive properties No data available t) Oxidizing properties No data available

10. STABILITY AND REACTIVITY

- 10.1 Reactivity No data available.
- 10.2 Chemical stability No data available.
- 10.3 Possibility of hazardous reactions No data available.
- 10.4 Conditions to avoid No data available.
- 10.5 Incompatible materials Strong acids, Strong oxidizing agents, combustible matter e.g. cotton waste.

10.6 Hazardous decomposition products

Other decomposition products - no data available.

11. **TOXICOLOGICAL INFORMATION**

11.1 Information on toxicological effects

Acute toxicity No data available.

Skin corrosion/irritation No data available.

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC:	3 - Group 3: Not	classifiable as to it	s carcinogenicity to human	s (Lead(II) carbonate)
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2A - Group 2A: Probably carcinogenic to humans (Lead(II) carbonate)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Lead(II) carbonate)

2A - Group 2A: Probably carcinogenic to humans (Lead(II) carbonate)

Reproductive toxicity

Known human reproductive toxicant.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard No data available

Potential health effects

Inhalation	Harmful if inhaled. May cause respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	Harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure

Lead salts have been reported to cross the placenta and to induce embryo- and feto- mortality. They also have teratogenic effect in some animal species. No teratogenic effects have been reported with exposure to organometallic lead compounds. Adverse effects of lead on human reproduction, embryonic and fetal development, and postnatal (e.g., mental) development have been reported. Excessive exposure can affect blood, nervous, and digestive systems. The synthesis of hemoglobin is inhibited and results in anemia. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result. Additional symptoms of overexposure include: joint and muscle pain, weakness of the extensor muscles (frequently the hand and wrist), headache, dizziness, abdominal pain, diarrhea, constipation, nausea, vomiting, blue line on the gums, insomnia, and metallic taste. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: Not available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 5.000 mg/l - 96.0 h

- **12.2 Persistence and degradability** No data available.
- **12.3 Bio accumulative potential** No data available.
- **12.4 Mobility in soil** No data available.
- 12.5 Results of PBT and vPvB assessment No data available.
- **12.6 Other adverse effects** Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14.	TRANSPORT INFORMATION				
14.1	UN number ADR/RID: 2291		IMDG: 2291	IATA: 2291	
14.2	2 UN proper shipping name ADR/RID: ENVIRONMENTALLY IMDG: ENVIRONMENTALLY IATA: Environmentally hazar		HAZARDOUS SUBSTANCE, SOLI HAZARDOUS SUBSTANCE, SOLI dous substance, solid, n.o.s. (Lead(D, N.O.S. (Lead(II) carbonate) D, N.O.S. (Lead(II) carbonate) II) carbonate)	
14.3	Transport hazard class(es) ADR/RID: 6.1		IMDG: 6.1	IATA: 6.1	
14.4	Packaging group ADR/RID: III		IMDG: III	IATA: III	
14.5	5 Environmental hazards ADR/RID: yes		IMDG Marine Pollutant: Yes	IATA: yes	

14.6 Special precautions for user No data available.

15. REGULATORY INFORMATION

- **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture No data available.
- **15.2 Chemical Safety Assessment** No data available.

16. OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Michael Harding Art Materials Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.