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MICHAEL HARDING ARTIST OIL COLORS COLORS CONTAINING LEAD PIGMENTS

1. Identification of the Preparation and of The Company

MICHAEL HARDING ARTIST OIL COLORS -COLORS CONTAINING

Product Name and/or code: LEAD PIGMENTS

Effective Date: 1-Jun-15

Manufacturer: Michael Harding Art Materials, Ltd.

36 Springdale Industrial Estate

Cwmbran, Gwent NP44 -5BD, Wales

Information Contact: North America: 978-549-4029;

UK/Europe: 44 (0) 1633 - 484-700

Emergency Contact: Contact your local Poison Control Center

Product Use: ART MATERIAL - Consumer Product

2. Hazards Identification

Information pertaining to particular dangers for man and environment.

This product has been classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Emergency Overview

WARNING! HARMFUL IF SWALLOWED. Danger of cumulative effects. Cancer Hazard. May cause birth defects and damage to blood, kidney, nervous system.

Label Elements

Conforms to ASTM D-4236

Pictograms







For Lead compounds GHS07, GHS09, GHS08

Signal Word WARNING!

Hazard Statement Danger of cumulative effects. Cancer Hazard. May cause birth

defects and damage to blood, kidney, nervous system.

Precaution Statement Do not eat. Avoid contact. Avoid making dust. Do not sand.

Wash after use.

Children's Statement KEEP OUT OF REACH OF CHILDREN.

Classification of the Product:

Health 3 - Warning. Corrosive or toxic. Avoid skin contact or

NFPA inhalation.

Flammability 1- Combustible if heated.

Reactivity 0 - Stable

HMIS Health 3 - Serious

Flammability 1 - Slight Hazard

Physical Hazard 0 - Minimal Hazard

Regulation (EC) No. 1272/2008 Lead compounds are classified in Annex VI of the Classification

Labeling and Packaging



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Export and Import of Dangerous Chemicals Regulation (EC)No. 649/2012

The ingredients of this product are listed in the Annex I of the regulation.

Directive 67/548/EEC & Directive 1999/45/EC Lead compounds, major components of these products are

Lead compounds, major components of these products are classified as H302, H332, H360, H373, H400, H410. P201, P202, P260, P264, P270, P271, P273, P280, P301/312/330, P304/340/312, P308/313, P391, P405, P501.

3. Composition/Information on Ingredients:

Substances:

The various products listed under Section 16 contain non- hazardous natural drying oils, organic and inorganic pigments, additives.

Hazardous Ingredients - Lead compounds: Lead Carbonate (CAS 1319-46-6) ------60.0 - 90.0%

Lead Antimoniate (CAS 8012-00-08)------60.0 - 90.0% Lead Stannate (CAS 12143-43-0)-----60.0 - 90.0%

Risk and Safety Phrases:

Ingredients are marked according to CLP Regulation (CLP-Regulation (EC) No 1272/2008) and according to DSD (Dangerous Substances Directive (67/548/EEC)) and DPD (Dangerous Preparations Directive (1999/45/EC)). These ingredients are regarded as trade secrets.

4	1. First Aid Measures
Inhalation	Supply fresh air. If required, provide artificial respiration. Consult with a doctor, physician or qualified health professional if symptoms persist. In case of unconsciousness place patient securely in side position for transportation (if needed).
Skin Contact	Remove any contaminated clothing. Wash affected area immediately with water and soap and rinse thoroughly.
Eye Contact	Flush area with water, lifting the upper and lower lids until no evidence of product remains. Get medical attention. Do not wear contact lenses while handling.
Ingestion	Drink water or milk to dilute. Do not induce vomiting. Contact a physician.
Most important symptoms and effects, both acute and delayed	Typical clinical manifestations of lead poisoning include weakness, irritability, asthenia, nausea, abdominal pain with constipation, and anemia.
Indication of any immediate medical attention and special treatments needed	Symptoms of poisoning may occur after several hours; therefore medical observation for at least 48 hours after the accident is recommended. In case of ingestion only if ordered by a doctor, physician or qualified health professional, induced vomiting or application of laxatives may be appropriate; treat as for lead poisoning. Regular blood monitoring for lead is needed to confirm exposure controls are adequate.



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5.	Fire	figh	nting	Measures

Extinguishing Media Water, foam, carbon dioxide or dry chemical equipment. Fire/Explosion Hazards This product is not known to present any fire hazard.

Flashpoint/Flammability

This product is not known to be flammable but as a precaution keep product in cool place. It can be combustible if heated.

Special hazards arising from the substance or May give off toxic fumes in case of fire, including lead fumes. mixture

mixture		
6. Accidental Release Measures		
Environmental precautions	No product should be released to the environment without due	
	care.	
Methods and Materials for Containment and	Contain spill. Recover as much as possible with sand, soil or	
Cleaning up	similar product. Place into closed container and store in a safe	
	location to await disposal. Wash the spill area with soap and	
	water.	
7.	Handling and Storage	
Safe Handling	Use under ventilated conditions. Avoid eye contact. For	
	personal protection, we recommend that employees wash	
	thoroughly after handling product. Always wash before eating,	
	smoking or using toilet facilities. Keep container closed when	
	not in use.	

Keep the sample in a cool dry ventilated area. Keep away from

fire and heating sources.

8. Exposure Controls/Personal Protection

Personal Protective Equipment Wear safety goggles and protective gloves to avoid dust

contact.

Exposure Limits 0.05 mg/m3 (USA. ACGIH Threshold Limit Values (TLV))

Component	CAS-No.	Value	Control	Basis
			parameter	
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 limits

Storage



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Component	CAS-No.	Parameters	Value	Biologica I	Basis
Lead(II) carbonate	598-63-0	Lead	0.7 mg/l	Blood	Chemical Agents Directive - Annex II: Binding biological limit values
	Remarks	Biological monitoring must include measuring the blood-(PbB) using absorption spectrometry or a method giving eresults., Medical surveillance is carried out if: - exposurer concentration of lead in air is greater than 0,075 mg/m3, as a time-weighted average over 40 hours per week, or lead level greater than 40 µg Pb/100 ml blood is measure individual workers. Practical guidelines for biological mor and medical surveillance must be developed in accordance article 12, paragraph 2. These include recommendations biological indicators (e.g. ALAU, ZPP, ALAD) and biological monitoring strategies.		ethod giving equivalent :- exposure to a 075 mg/m3, calculated er week, or - a blood- d is measured in ological monitoring in accordance with mendations of	

Respiratory and Ventilation

Wear approved NIOSH/MSHA respirator if exposure to mist or vapor exceed applicable PEL/TLV limits. Use in accordance with manufacturer's use limitations and OSHA STANDARD 1910-34. Local ventilation may be used to prevent routine inhalation.

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)



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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 EN 374, 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.

Eye 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).

9. Physical and Chemical Properties

Appearance Viscous colored oil paints

Physical State Solid - Paste

Color See product list in Section 16

Odor Slightly aromatic.

Boiling Point Greater than 100°C/ 212°F

Freezing Point Not applicable State (pH) 8.5 - 9.2

Specific Gravity 1.0 - 2.0

Viscosity Not determined (Viscous material)

Flashpoint Greater than 230°C/ 446°F

Vapor PressureNot applicableVapor DensityNot applicableSolubility in waterNot Miscible

10. Stability and Reactivity

Reactivity: Not expected to be reactive.

Chemical Stability Stable

Conditions to Avoid Keep away from heat, sparks and flame. Incompatible materials Combustible material (eg. Cotton)

Hazardous Decomposition Products May give off toxic fumes in case of fire, including lead fumes.

11. Toxicological Information

Health Effects Studies have not been performed on this particular mixture.

The information below is based on data on the individual

ingredients.

Oral Low Acute Toxicity, but High Chronic hazard, not otherwise

quantifiable.



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Inhalation Overexposure my cause symptoms of chronic lung disease and

lead poisoning.

Dermal This product is not a primary skin irritant.

Eye Effects May cause physical irritation and inflammation.

Toxicokinetic assessment: 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 below acceptable limits.

12. Ecological Information

Aquatic toxicity No information available. Persistence and degradability No information available.

Bio accumulative potential Inorganic lead is considered to be bioaccumulating in the

environment, and may accumulate in aquatic and terrestrial

plants and animals.

Mobility in soil No information available.

Details for elimination: Inorganic, water soluble product. Can be separated in waste water treatment plants by filtration and/or sedimentation. Highly alkaline or acidic liquids may dissolve Pb.

Additional ecological information For total elimination from aqueous media, chemical

flocculation is required. Due to Pb. Any discharge into

environment has to be avoided.

13. Disposal Considerations

Dispose of all waste material in accordance with all applicable federal, state and local regulations for the disposal of hazardous waste. Must be disposed as hazardous chemical waste. Do not allow product to reach sewage system.

European waste catalogue:

06 03 13* solid salts and solutions containing heavy metals,

06 04 05* wastes containing other metals or 06 03 15* metal oxides containing heavy metals.

14. Transport Information

The following transportation categories do not apply to this mixture sold as a consumer use product (non-bulk).

DOT Non-Bulk

Shipping Name LEAD COMPOUNDS, SOLUBLE, N.O.S. (Lead Carbonate)

Technical Shipping Name LEAD COMPOUNDS, SOLUBLE, N.O.S.

Hazard Class 6.1



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UN Number 2291 **Packing Group** iii

IMDG

Shipping Name LEAD COMPOUNDS, SOLUBLE, N.O.S. **Technical Shipping Name** LEAD COMPOUNDS, SOLUBLE, N.O.S.

Hazard Class 6.1 **UN Number** 2291 **Packing Group** iii

EmS Number Not applicable

Marine Pollutant EHS/Marine Pollutant Mark required

ICAO/IATA

Shipping Name LEAD COMPOUNDS, SOLUBLE, N.O.S. **Technical Shipping Name** LEAD COMPOUNDS, SOLUBLE, N.O.S.

Hazard Class 6.1 **UN Number** 2291 **Packing Group** iii

Michael Harding Art Materials Ltd. are IATA certified through the UK CAA.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the materials.

15. Regulatory Information

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

SARA Not applicable

Section 355 (extremely hazardous

Not applicable substances) Section 313 (Specific toxic chemical listing) Not applicable

TSCA (Toxic Substance Control Act) All ingredients are listed.

The Safe Drinking Water and Toxic As of June 1, 2015 this product contains lead and lead

Enforcement Act of 1986 - California compounds known to the State of California to cause cancer, Proposition 65 birth defects or other reproductive harm, at levels which would

require a warning under the statue.

Chemicals known to cause cancer Lead and lead compounds

Chemicals known to cause reproductive

toxicity for females

Lead and lead compounds

Chemicals known to cause reproductive

toxicity for males

Lead and lead compounds

Chemicals known to cause developmental

Lead and lead compounds

Carcinogenicity categories

EPA (Environmental Protection Agency) Possible human carcinogen



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TLV (Threshold Limit Value established by ACGIH)

Possible human carcinogen

MAK (German Maximum Workplace

No information available.

Concentration)

NOISH-Ca (National Institute for Occupational Possible human carcinogen

Safety & Health)

OSHA-Ca (Occupational Safety & Health Possible human carcinogen

Administration)

16. Other Information

Product Number and Color Name	Pigment Identification
225 Foundation White	#308 and Titanium White
307 Cremnitz White no. 1 (Walnut Oil)	PW 1 Lead Carbonate
308 Cremnitz White no. 2 (Linseed Oil)	PW 1 Lead Carbonate
512 Lead Tin Yellow Light	Lead Stannate Type 1
514 Lead Tin Yellow Lemon	Lead Stannate Type 1
605 Genuine Naples Yellow Light	PY 41 Lead Antimoniate
606 Genuine Naples Yellow Dark	PY 41 Lead Antimoniate
607 Stack Lead White	PW 1 Lead Carbonate

Abbreviations Legend:

H Statements	P Statements
H302 - Harmful if swallowed.	P201 – Obtain special instructions before use.
H332 - Harmful if inhaled.	P202 – Do not handle until all safety precautions have been read and understood.
H360 - May damage fertility or the unborn child.	P260 – Do not breathe dust/fume/gas/mist/vapors/spray.
H373 - May cause damage to organs through prolonged or repeated exposure.	P264 – Wash thoroughly after handling.
H410 - Very toxic to aquatic life with long lasting effects.	P270 – Do no eat, drink or smoke when using this product.

P271 – Use only outdoors or in a well-ventilated area.

P273 – Avoid release to the environment

P280 – Wear protective gloves/protective clothing/eye protection/face protection.



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P301 + **P312** – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P304 + **P340** – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308 + **P313** – IF exposed or concerned: Get medical advice/attention.

P391 – Collect spillage.

P405 – Store locked up.

P501 – Dispose of contents/container to an approved waste disposal plant.

Supersedes MSDS 11-Oct-13
Reason for Issue: GHS Format

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