1. Identification of the Preparation and of The Company

Product Name and/or code:	MICHAEL HARDING ARTIST OIL COLORS -COLORS CONTAINING 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:
NFPA	Health 3 - Warning. Corrosive or toxic. Avoid skin contact or 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

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 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. 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.

5. Firefighting 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 mixture	May give off toxic fumes in case of fire, including lead fumes.

6. Accidental Release Measures

Environmental precautions	No product should be released to the environment without due care.
Methods and Materials for Containment and Cleaning up	Contain spill. Recover as much as possible with sand, soil or 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.
Storage	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 parameter	Basis
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

Component	CAS-No.	Parameters	Value	Biological	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-lead level (PbB) using absorption spectrometry or a method giving equivalent results., Medical surveillance is carried out if: - exposure to a concentration of lead in air is greater than 0,075 mg/m3, calculated as a time-weighted average over 40 hours per week, or - a blood-lead level greater than 40 µg Pb/100 ml blood is measured in individual workers. Practical guidelines for biological monitoring and medical surveillance must be developed in accordance with article 12, paragraph 2. These include recommendations of biological indicators (e.g. ALAU, ZPP, ALAD) and biological monitoring strategies.			

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)

	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 Pressure	Not applicable
Vapor Density	Not applicable
Solubility in water	Not 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.

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.
Additional ecological information	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. 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

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 substances)	Not applicable
Section 313 (Specific toxic chemical listing)	Not applicable
TSCA (Toxic Substance Control Act)	All ingredients are listed.
The Safe Drinking Water and Toxic Enforcement Act of 1986 - California Proposition 65	As of June 1, 2015 this product contains lead and lead compounds known to the State of California to cause cancer, 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

TLV (Threshold Limit Value established by ACGIH)	Possible human carcinogen
MAK (German Maximum Workplace Concentration)	No information available.
NOISH-Ca (National Institute for Occupational Safety & Health)	Possible human carcinogen
OSHA-Ca (Occupational Safety & Health Administration)	Possible human carcinogen

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

H302 - Harmful if swallowed.

H332 - Harmful if inhaled.

H360 - May damage fertility or the unborn child.

H373 - May cause damage to organs through prolonged or repeated exposure.

H410 - Very toxic to aquatic life with long lasting effects.

P Statements

P201 – Obtain special instructions before use.

P202 – Do not handle until all safety precautions have been read and understood.

P260 – Do not breathe dust/fume/gas/mist/vapors/spray.

P264 – Wash … thoroughly after handling.

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.

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.

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Reason for Issue:	GHS Format
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