

## SAFETY DATA SHEET

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## SAFETY DATA SHEET

### MICHAEL HARDING ARTIST OIL COLORS COLORS CONTAINING LEAD PIGMENTS

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#### 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

Pictograms

Conforms to ASTM D-4236



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



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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 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. |



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#### 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. |
| <u>Exposure Limits</u>        | 0.05 mg/m <sup>3</sup> (USA. ACGIH Threshold Limit Values (TLV)) |

| Component          | CAS-No.  | Value   | Control parameter      | Basis   |
|--------------------|----------|---------|------------------------|---|
| Lead(II) carbonate | 598-63-0 | TWA     | 0.15 mg/m <sup>3</sup> | Europe. Chemical Agents Directive - Annex I: Binding occupational exposure limit values |
|                    | Remarks  | Binding |                        |   |

Biological occupational limits



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| 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/m <sup>3</sup> , 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: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)  
 Splash protection Material: Nitrile rubber  
 Minimum layer thickness: 0.11 mm Break through time: 480 min  
 Material tested: Dermatrill® (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 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.  |



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|                           |   |
|---------------------------|---|
| Inhalation                | Overexposure may 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.<br>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                                |
| <b>IMDG</b>             |                                    |
| 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 |
| <b>ICAO/IATA</b>        |                                    |
| 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.   |
| <i>The Safe Drinking Water and Toxic Enforcement Act of 1986 - California Proposition 65</i> | 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 statute. |
| 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   |
| <b>Carcinogenicity categories</b>  |   |
| 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 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**

| <u>Product Number and Color Name</u>   | <u>Pigment Identification</u> |
|--|-------------------------------|
| 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 not 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

Reason for Issue:

Prepared by:

11-Oct-13

GHS Format

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