deffner & Johann

Supplies for RESTORATION | CONSERVATION | ART HANDLING – SINCE 1880

SAFETY DATA SHEET

1917 108 | Artist Oil Colors, Lemon Yellow

info@deffner-johann.de | +49 9723 9350-0

1. Identification of the Preparation and of The Company

Product Name and/or code:	MICHAEL HARDING ARTIST OIL COLORS - COLORS CONTAINING HEXAVALENT CHROMIUM
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.Cancer Hazard from inhaled dust. KEEP OUT OF REACH OF CHILDREN

Label Elements	Conforms to ASTM D-4236
Pictograms	  GHS 08 GHS 07
Signal Word	**WARNING!**
Hazard Statement	HARMFUL IF SWALLOWED.Cancer Hazard from inhaled dust. Do not spray apply.
Precaution Statement	Do not eat, drink or smoke while using. Dust is an irritant. Avoid all contact. Wear protective gloves and clothing. Avoid creating dust. Do not sand dry film. Provide good ventilation.Wash hands and face before eating or smoking.
Children's Statement	KEEP OUT OF REACH OF CHILDREN.
	Classification of the Product:
NFPA	Health 2-Warning.Maybe harmful if inhaled or swallowed. Flammability 1 - Combustible if heated Reactivity 0 - Stable
HMIS	Health 2 - Moderate Hazard Flammability 1 -Slight Hazard Physical Hazard 0 - Minimal Hazard
Regulation (EC) No. 1272/2008	Hexavalent chromium compounds are classified in the Annex I of the regulation.
Export and Import of Dangerous Chemicals Regulation (EC)No. 649/2012	This product and its ingredients are listed in the Annex I of the regulation.

Directive 67/548/EEC & Directive 1999/45/EC	Barium chromate (CAS: 10294-40-3) - Oxidizing Solids (Cat. 2) H272, Acute Tox (Oral, Cat. 4) H302, Acute Tox (Inhalation, Cat. 4) H332, Carc. (Cat. 1A) H350; P201, P202, P210, P220, P221, P261, P264, P270, P271, P280, P301+P312+P330, P304+P340+P312, P308+P313, P370+P378, P405, P501.

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 do not induce vomiting, immediately contact a doctor, physician or qualified health care professional.

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	Barium chromate (CAS: 10294-40-3) --10.00 - 30.00%

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.

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 combustible, but as a precaution keep product in cool place.

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	The following information refers to Barium chromate.

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Barium chromate	10294-40-3	TWA	0.500000 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
	Remarks	See Table Z-2 for the exposure limit for any operations or sectors where the exposure limit in § 1910.1026 is stayed or is otherwise not in effect Substance listed; for more information see OSHA document 1910.1026		
		TWA	0.500000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Eye, skin, & Gastrointestinal irritation Muscular stimulation Not classifiable as a human carcinogen		
		TWA	0.500000 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	1.000000 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		CEIL	1.000000mg/10 m3	USA. Occupational Exposure Limits (OSHA) - Table Z-2
		Z37.7-1971 This standard applies to any operations or sectors for which the exposure limit in the Chromium (VI) standard, Sec. 1910.1026, is stayed or is otherwise not in effect.		
		PEL	0.005000 mg/m3	OSHA Specifically Regulated Chemicals/Carcinogens
		1910.1026 This standard applies to occupational exposures to chromium (VI) in all forms and compounds in general industry, except: (a) Exposures that occur in the application of pesticides regulated by the Environmental Protection Agency or another Federal government agency (e.g., the treatment of wood with preservatives); (b) Exposures to portland cement; or (c) Where the employer has objective data demonstrating that a material containing chromium or a specific process, operation, or activity involving chromium cannot release dusts, fumes, or mists of chromium (VI) in concentrations at or above 0.5 µgm/m3 as an 8-hour time-weighted average (TWA) under any expected conditions of use. Chromium (VI) [hexavalent chromium or Cr(VI)] means chromium with a valence of positive six, in any form and in any compound OSHA specifically regulated carcinogen		

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		TWA	0.000200 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen See Appendix C See Appendix A		

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°FGreater than 100°C/ 212°FGreater than 100°C/ 212°FGreater than 100°C/ 212°FGreater than 100°C/ 212°FGreater 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:	Reaction with reducing agents.
Chemical Stability	Stable
Conditions to Avoid	Keep away from heat, sparks and flame.
Incompatible materials	Combustible material (eg. Cotton)
Hazardous Decomposition Products	No information available.

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	Expected to be greater than 2,000 mg/kg (rats)
Ingestion	Nausea, vomiting and abdominal pain.
Inhalation	This product poses no inhalation risk.
Dermal	Not a skin sensitizer.
Eye Effects	May cause irritation

12. Ecological Information

Toxicity:	Very toxic to aquatic organisms.
Aquatic toxicity	Very toxic to aquatic organisms.
Persistence and degradability	A mixture of biodegradable and non biodegrable ingredients. No other information is available.
Bio accumulative potential	Not expected to bioaccumulate significantly.
Mobility in soil	The product has poor water-solubility.
Additional ecological information	No information available.

13. Disposal Considerations

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Contact specialist disposal companies. Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

14. Transport Information

The following transportation categories do not apply to this mixture sold as a consumer use product (non-bulk). The information below refers to the classification of Barium chromate.

DOT Non-Bulk

Shipping Name	Oxidizing solid, n.o.s. (Barium chromate)
Technical Shipping Name	Oxidizing solid, n.o.s. (Barium chromate)
Hazard Class	5.1
UN Number	1479
Packing Group	II

IMDG

Shipping Name	Oxidizing solid, n.o.s. (Barium chromate)
Technical Shipping Name	Oxidizing solid, n.o.s. (Barium chromate)
Hazard Class	5.1
UN Number	1479
Packing Group	II
EmS Number	F-A, S-Q
Marine Pollutant	Yes

ICAO/IATA

Shipping Name	Oxidizing solid, n.o.s. (Barium chromate)
Technical Shipping Name	Oxidizing solid, n.o.s. (Barium chromate)
Hazard Class	5.1
UN Number	1479
Packing Group	II

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)	Barium chromate (CAS: 10294-40-3)
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 chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
Chemicals known to cause cancer	Barium chromate (CAS: 10294-40-3)
Chemicals known to cause reproductive toxicity for females	Barium chromate (CAS: 10294-40-3)
Chemicals known to cause reproductive toxicity for males	Barium chromate (CAS: 10294-40-3)

Chemicals known to cause developmental toxicity	Barium chromate (CAS: 10294-40-3)

Carcinogenicity categories

EPA (Environmental Protection Agency)	Not applicable to this mixture.
TLV (Threshold Limit Value established by ACGIH)	Not applicable to this mixture.
MAK (German Maximum Workplace Concentration)	Not applicable to this mixture.
NOISH-Ca (National Institute for Occupational Safety & Health)	Not applicable to this mixture.
OSHA-Ca (Occupational Safety & Health Administration)	Not applicable to this mixture.

16. Other Information

Product Number and Color Name	Pigment Identification
108 Lemon Yellow	PY 31 Barium Chromate

Hazard statement(s)

H272	May intensify fire; oxidiser.
H302 + H332	Harmful if swallowed or if inhaled
H350	May cause cancer.

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat.
P220	Keep/Store away from clothing/ combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Reason for Issue: GHS Format

Prepared by: Rudolph J. Jaeger, Ph.D., DABT, ERT (UK)
Chief Toxicologist and President
ENVIRONMENTAL MEDICINE, INC.
263 CENTER AVENUE
WESTWOOD, NJ 07675
jaegerr@envmed.com
201-666-7929 x13

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