



SAFETY DATA SHEET

JACKSON'S ARTIST PIGMENTS

PRODUCT NAME: JACKSON'S ARTIST PIGMENT (EARTH)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: JACKSON'S ARTIST PIGMENT (EARTH)

Includes: Cadmium Lemon, Cadmium Yellow Pale, Cadmium Yellow Deep, Cadmium Orange, Cadmium Vermilion, Cadmium Red Light, Cadmium Red Deep, Cadmium Red Rubine, Cadmium Red Brownish, Cobalt Green Light, Cobalt Turquoise, Cobalt Blue Deep, Cobalt Blue Light, Cobalt Cerulean Blue, Nickel Titanate Yellow, Titanium Orange, Chromium Green Oxide (Kiwi Shade), Hansa Yellow Light, Benzimidazole Yellow, Nickel Azo Yellow, Hansa Yellow Medium, Hansa Yellow Deep, Permanent Orange, Benzimidazole Orange, Pyrrole Red, Permanent Red, Azo Red, Ultramarine Pink, Potter's Pink, Ultramarine Violet, Manganese Violet Deep, Quinacridone Violet, Quinacridone Magenta, Ultramarine (Red Shade), Ultramarine Blue (Green Shade), Prussian Blue Permanent, Phthalo Blue (Green Shade), Phthalo Green (Blue Shade), Lamp Black Intense, Carbon Black Deep, Ivory Black, Titanium White Rutile, Zinc White, Titanium White Anatase, Graphite Silver, Graphite Black

1.2 Details of the supplier of the safety data sheet:

Jackson's Art Supplies
1 Farleigh Place
N16 7SX London
jacksonsart.com

Telf: +44 (0)207 254 0077
9-5:30 Mon-Fri
10-6 Saturday

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.

Label elements: This product has no label elements.

Other hazards: This substance is not identified as a PBT substance.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name Colour Index CAS No.

Cadmium Lemon PY35 8048-07-5 Cadmium Yellow Pale PY35 8048-07-5 Cadmium Yellow Deep PY37 68859-25-6 Cadmium Orange PO20 12656-57-4
Cadmium Vermilion PR108 58339-34-7 Cadmium Red Light PR108 58339-34-7 Cadmium Red Deep PR108 58339-34-7
Cadmium Red Brownish PR108 58339-34-7 Cobalt Green Light PG50 68186-85-6 Cobalt Turquoise PB36 68187-11-1 Cobalt Blue Deep PB72 68186-87-8 Cobalt Blue Light PB28 1333-88-6
Cobalt Cerulean Blue PB36 68187-11-1 Nickel Titanate Yellow PY53 8007-18-9 Titanium Orange PBr24 68186-90-3 Chromium Green Oxide (Kiwi Shade) PG17 1308-38-9 Hansa Yellow Light PY3 6486-23-3 Benzimidazole Yellow PY154 68134-22-5 Nickel Azo Yellow PY150 68511-62-6 Hansa Yellow Medium PY74 6358-31-2 Hansa Yellow Deep PY65 6528-34-3 Permanent Orange PO62 52846-56-7 Benzimidazole Orange PO36 12236-62-3 Pyrrole Red PR254 122390-98-1 Permanent Red PR170 2786-76-7
Azo Red PR144 5280-78-4 Ultramarine Pink PR259 12769-96-9 Potter's Pink PR233 68187-12-2 Ultramarine Violet PV15 12769-96-9 Manganese Violet Deep PV16 10101-66-3 Quinacridone Violet PV19 1047-16-1 Quinacridone Magenta PR122 16043-40-6 Ultramarine (Red Shade) PB29 1317-97-1 Ultramarine Blue (Green Shade) PB29 1317-97-1 Prussian Blue Permanent PB27 25869-00-5 Phthalo Blue (Green Shade) PB15:3 147-14-8 Phthalo Green (Blue Shade) PG7 1328-53-6 Lamp Black Intense PBk6 1333-86-4 Carbon Black Deep PBk7 1333-86-4 Ivory Black PBk9 8021-99-6 Titanium White Rutile PW6 13463-67-7

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

Eye Contact: Flush eye with flowing water. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin Contact: Wash contaminated skin with soap & water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. In each case if symptoms develop seek medical attention.

Most important symptoms and effects, both acute and delayed Potential acute health effects

Eye contact: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards. Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following: irritation, redness

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing

Skin contact: No specific data.

Ingestion: No specific data.

Indication of any immediate medical attention and special treatment needed

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: No restriction in fire situations. Suitable extinguishing media for the surrounding fire should be used. Avoid use of a solid water stream or jet as it may scatter and spread fire.

Unsuitable extinguishing media: Water jet.

Special hazards arising from the substance or mixture

Hazards from the substance or mixture: Fine dust clouds may form explosive mixtures with air.

Hazardous thermal decomposition products: Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides halogenated compounds smoke oxides of nitrogen

Advice for firefighters

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut

off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in 'For non-emergency personnel'.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion proof equipment. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Specific end use(s)

Recommendations: Not available.

Industrial sector specific solutions: Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters occupational exposure limits

General Pigments: No exposure limit value known. Observe OEL limits for inhalable and respirable nuisance dust.

Mars Black: EH40/2005 WELs (United Kingdom (UK), 12/2011).

STEL: 10 mg/m³, (as Fe) 15 minutes. Form: Fume

TWA: 5 mg/m³, (as Fe) 8 hours. Form: Fume

DNEL : Dust Inhalable 10 mg/m³ , Respirable dust 3 mg/m³

Exposure controls

Appropriate engineering controls: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder

Odour: None

Melting point: General Products: >1000°C

Manganese Violet: >400 °C

Prussian Blue: >140°C

Phthalos x 2: >200 °C

Quinacridone Magenta: >180 °C

Phthalo Green: >220 °C

Decomposition temperature: Mars Black >80 °C

Flash point: N/A.

Ph: 4-11Solubility: Insoluble in water.

Flammability: N/A

Boiling point: N/A

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Incompatible materials:

Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced except:

Manganese Violet: Ammonium salts given off during combustion/decomposition.

Quinacridones, Phthalo Blue, Phthalo Green: Hydrogen chloride (HCL), Oxides of carbon, copper and nitrogen given off during combustion/decomposition.

Pyrrol Red - substances to avoid: strong oxidizing agents, strong bases, strong acids. Prussian Blue: ammonia, hydrogen cyanide, dicyanogen and nitrous oxides given off during combustion/decomposition.

Ultramarine Products: React with acids releasing hydrogen sulphide gas.

Viridian Green: A small amount (<0.1% as Cr) of reversion to hexavalent chromium may occur if the dry chromium (III) oxide powder is exposed to elevated temperatures.

Carbon Black, Lamp Black: May react exothermically upon contact with strong oxidizers. Ivory Black: In combustion emits toxic fumes of carbon dioxide/carbon monoxide.

Mars Black: At temperatures above 80 °C the product may become unstable and oxidise. This generates additional heat which, under unfavourable conditions, may result in the combustion of flammable materials.

The product should therefore not be stored near heat sources.

SECTION 11: TOXICOLOGICAL INFORMATION

Eye contact: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following: Irritation, redness

Inhalation:

Adverse symptoms may include the following: respiratory tract irritation, coughing

Skin contact: No specific data.

Ingestion: May cause discomfort if swallowed.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Potential chronic health effects: Not available.

Conclusion/Summary: Not available.

General: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: General Pigments: No known significant effects or critical hazards.

Mars Black: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Other information: Not available.

Oral Toxicity: General Products LD50 (rat)>10g/Kg

Hansa Yellow Light LD50 (rat)>2g/Kg

Quinacridone Violet LD50 (rat)>5g/Kg

Manganese Violet LD50 (rat)>12.9g/Kg

Alizarin Crimson LD50 (rat)>2g/Kg

Permanent Red LD50 (rat)>5g/Kg

Quinacridone Magenta LD50 (rat)>2g/Kg

Ultramarine Blue LD50 (rat)>5g/Kg

Cadmium Lemon LD50 (rat)>1.2g/Kg

Cadmium Red LD50 (rat)>5g/Kg

Cobalt Blue LD50 (rat)>2g/Kg

Prussian Blue LD50 (rat)>5.1g/Kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Conclusion/Summary: Not available.

Persistence and degradability Conclusion/Summary: Not available.

Bioaccumulative potential

General Products: Not available.

Mobility in soil

Soil/water partition coefficient (Koc): Not available

Mobility: Not available

Results of PBT and vPvB assessment

PBT: Not available.

P: Not available. B: Not available. T: Not available.

vPvB: Not available.

vP: Not available. vB: Not available.

Other adverse effects

No known significant effects or critical hazards.

Notes

The product is virtually insoluble in water and thus can be separated from water mechanically in suitable effluent treatment plants.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any

by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Examine possibilities for recycling. Return large quantities to the manufacturer.

Hazardous waste: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC

Packaging

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

Not regulated for transport. Keep separated from foodstuffs.

SECTION 15: REGULATORY INFORMATION

Labelling

This product is not a substance subject to mandatory marking.

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

EU Regulation (EC) No. 1907/2006 (REACH): Not listed

SECTION 16: OTHER INFORMATION

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.