

MATERIAL SAFETY DATA SHEET  
Utrecht Oil Paints



MSDS 902

Date: September 15, 2009

Information: 800-223-9132  
or: 609-409-8001

### Section 1 – Company and Product Identification

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Utrecht Art Supply  
6 Corporate Drive  
Cranbury, NJ 08512

Product Line: Utrecht Oil Paints

15003 Utrecht Artists' Color Theory Set  
15004 Utrecht Artists' Oil Portrait Set  
15005 Utrecht Artists' Oil Landscape Set  
15006 Utrecht Artists' Oil Complete Oil Set  
15007 Utrecht Artists' Oil Wood Box Set  
15009 Utrecht Artists' Oil Basic Set

See Appendix A for individual oil paint pigments and their associated toxicity.

### Section 2 – Hazard Identification (composition / information on ingredients)

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*General statement of toxicity*

Oil paints generally are not harmful when in contact with the skin. Certain pigments made with cadmium are potentially harmful if inhaled, but there is minimal risk in normal use. These paints should not be spray applied and if dust is generated from operations such as sanding dried pigment, respiratory protection, (dust mask), should be used. As a general rule, wear respiratory protection for all operations that generate dust, (e.g., sanding dry paint), and apply with brush only. Avoid accumulating paint residue under fingernails or allowing paint to contact cuts or skin abrasions.

*Formulation overview*

Utrecht oil paints are formulated with pigment, oils such as linseed and safflower, and other proprietary components.



#### *Toxicity associated with pigments*

Pigment toxicity reflects individual chemical components. These are noted in Appendix A. Those materials listed as Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity under PROP 65<sup>1</sup> are listed separately.

### **Section 3 – Hazardous Component Information (hazard identification)**

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Appendix A lists Utrecht oil paint pigments. Toxicity reflects inherent hazards of each component hazards along with its estimated exposures. The Risk Characterization for each paint product is noted in the preamble to Appendix A. In general, there is low risk of toxicity from skin exposure. Pigments with metals such as cadmium or manganese compounds should not be inhaled; thus, the guidance “Do not breathe dust. Do not spray apply.” While specific to such pigments, this guidance applies to all artist paints in general.

### **Section 4 – First Aid Measures**

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For overexposure due to accidental ingestion or inhalation, treat symptomatically. Adverse effects from skin exposure, (the expected route of exposure in normal use), are not expected.

Inhalation	If person is showing adverse effects in situations where dust from residue paint is being generated or the product is being sprayed without respiratory protection, remove person to fresh air. Seek medical help if recovery is not immediate.
Ingestion	Treat symptomatically; do not induce vomiting; seek medical help.
Skin Contact	Wash skin with soap and water or use a product specially formulated for oil paint removal. If paint has dried, first scrape residues off with a palette knife or other appropriate instrument.
Eye Contact	Flush eyes for up to 15 minutes with water; if irritation persists, seek medical help.

### **Section 5 – Fire Fighting Measures**

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The oil binders are combustible but do not evaporate significantly. Rags that have linseed oil residues may auto-ignite in time due to the exothermic reaction of oxidation. Rags with oil residues should be stored in enclosed metal containers that are designed for fire retardation.

Flash point, °C:

Linseed oil	222°C (432°F)
Safflower oil	266°C (510°F), smoke point of refined product
Auto-ignition Temperature:	NA
Lower explosive limit:	NA
Upper explosive limit:	NA
Extinguishing media:	Carbon dioxide, foam, dry chemical

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<sup>1</sup> The Safe Drinking Water and Toxic Enforcement Act of 1986



## Section 6 – Accidental Release Measures

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It is not expected that the container sizes, (other than 1 gallon), would result in a spill commensurate with the definition of ‘accidental release.’

Spill Procedure:        Contain spillage; use dustless methods for cleanup.

## Section 7 – Handling and Storage

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Store at room temperature.  
Do not contaminate food products.  
Wash hands after use.  
Avoid eye contact.

## Section 8 – Exposure Control/Personal Protection

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Normal usage of oil paints does not require special Personal Protection Equipment, (PPE). Disposable gloves are recommended to minimize skin contact. Wash hands to remove skin exposure, should it occur. Do not use solvents on skin.

## Section 9 – Physical/Chemical Properties

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Oil paints are vegetable oil-based formulations incorporating a variety of pigments, (see Appendix A).

## Section 10 – Stability and Reactivity

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Oil paints are considered stable and non-reactive.

## Section 11 – Toxicology Information

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Oil paints generally have low toxicity. Some pigments have a risk of adverse effects if excessive inhalation exposure occurs. In general, avoid inhalation exposure by not applying as a spray and by wearing respiratory protection if previous work is sanded. Appendix A lists the oil colors and their associated toxicity determined by risk characterization. In general, these paints are considered non-toxic at the anticipated levels of exposure, (i.e., skin exposure, generally restricted to the hands).

### Toxicity associated with specific formula components

Cadmium:        Prop 65-cancer listing (10/1/87)  
                      Prop 65-developmental toxicity listing, male (5/1/97)



May cause lung, kidney, and liver damage  
Cobalt: Prop 65-cancer listing (7/1/92; cobalt [II] oxide)  
Lead: Prop 65-cancer listing (10/1/92)  
Manganese: Overexposure may affect the Central Nervous System and lungs.  
Symptoms include transitory psychosis, tiredness, weakness and pneumonitis.

## **Section 12 – Ecological Information**

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Toxicity to animals, fish and insects is not available.

Data on persistence, bioaccumulation potential and mobility in soil is not available.

## **Section 13 – Disposal Considerations**

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Under typical use situations, oil paints should be used up rather than disposed. One way to efficiently use excess paint on your brushes is to apply the paint to a new canvas as ground. Once cleared of most residual paint, brushes can be washed in linseed oil. Collect paint solids in a separate container for eventual disposal in accordance with local regulations. Rags that are used to wipe brushes should be stored in a metal container designed to minimize fire hazard. Soap and water may be used as a final measure.

## **Section 14 – Transport Information**

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No restrictive Department of Transportation requirements; not hazardous for shipping

## **Section 15 – Regulatory Information**

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Regulated by the US Consumer Product Safety Commission for chronic hazards under Labeling of Hazardous Art Materials Act, (LHAMA), codified at 16 C.F.R. § 1500.14(b)(8), which requires that art materials be properly labeled if they present a chronic adverse health effect.

Product labeling conforms to ASTM 4236.

## **Section 16 – Other Information**

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## Appendix A: Pigments and Associated Toxicity

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### *Risk Characterization*

The potential adverse effects of various pigments are determined through a process of risk characterization.

This process first identifies the hazard of the material, (that is, the inherent toxicity of the product), and the dose-response (that is, the relationship of toxicity to systemic dose). The systemic dose is milligrams, (mg), of material per kilogram, (kg), of body weight: mg/kg. Once the hazard and dose-response are known, an estimation of exposure is made, (that is, how much systemic dose is expected).

The systemic dose, in the case of artists' paints, is generally due to the amount that touches the skin and is subsequently absorbed into the body. The systemic dose, measured in mg/kg body weight, is compared with the toxic dose-response determined in laboratory studies.

If the systemic dose is 100 times lower than the dose in animals that causes no harm, the risk to humans is judged acceptable. In the case of Utrecht oil paints when the systemic dose is judged 100-fold lower than the no effect level (NOEL) in animals, a designation of "no significant toxicity" is made.

The following lists the oil paint color along with its Color Index, where available. The risk characterization is noted and the primary chemical component(s) upon which this risk is based is noted in parentheses.

All Utrecht oil paints are judged safe for use under typical studio and educational settings. This includes pigments that carry the PROP 65 warning on their label, (pigments containing cadmium, lead, or cobalt [II] oxide).

Where "slight toxicity" is noted, this refers to unexpected excessive exposure from breathing dust or paint spray. In these cases the following cautionary statements are noted: "Do not breathe dust. Do not spray apply." All PROP 65 listed chemicals are categorized as "slight toxicity."

The designation "slight toxicity" does not reflect a quantitative comparison to other pigments; thus, the following list does not rank toxicities.

In the Appendix A list the Utrecht oil paint name is first noted followed by the Color Index of its pigment or pigments in parentheses. The risk characterization follows, "slight toxicity" or "no significant toxicity," followed by the identity of the pigment or pigments in parentheses. If a caution such as "do not breathe dust," or "do not spray apply" is appropriate, it is noted.



**Pigments listed under California's PROP 65**

(Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity)

Cadmium Orange (PO20) - Slight toxicity, (Cadmium sulfoselenide orange) Do not breathe dust. Do not spray apply.

Cadmium Red Deep (PR108) - Slight toxicity, (Cadmium sulfoselenide red) Do not breathe dust. Do not spray apply.

Cadmium Red Light (PR108) - Slight toxicity, (Cadmium sulfoselenide red) Do not breathe dust. Do not spray apply.

Cadmium Red Medium (PR108) - Slight toxicity, (Cadmium sulfoselenide red) Do not breathe dust. Do not spray apply.

Cadmium Yellow Deep (PO20, PY37) - Slight toxicity, (Cadmium sulfoselenide orange; Cadmium sulphide) Do not breathe dust. Do not spray apply.

Cadmium Yellow Lemon (PY37) - Slight toxicity, (Cadmium sulphide) Do not breathe dust. Do not spray apply.

Cadmium Yellow Light (PY37) - Slight toxicity, (Cadmium sulphide) Do not breathe dust. Do not spray apply.

Cadmium Yellow Medium (PY37) - Slight toxicity, (Cadmium sulphide) Do not breathe dust. Do not spray apply.

Cerulean Blue Pure (PB35) - Slight toxicity, (Cobalt stannate) Do not breathe dust. Do not spray apply.

Flake White (PW1) - Slight toxicity, (Basic lead carbonate) Do not breathe dust. Do not spray apply.

Flemish White (PW1) - Slight toxicity, (Basic lead carbonate) Do not breathe dust. Do not spray apply.

Naples Yellow Deep (PO20, PY43, PW6, PY37) - Slight toxicity, (Cadmium sulfoselenide orange; Hydrated ferric oxide; Mixed iron oxides; Titanium dioxide; Cadmium sulphide) Do not breathe dust. Do not spray apply.

Naples Yellow Light (PY37, PO20, PW6) - Slight toxicity, (Cadmium sulphide; Cadmium sulfoselenide orange; Titanium dioxide) Do not breathe dust. Do not spray apply.



**Pigments with “slight toxicity”**

These products are “AP Approved” by ACMI<sup>2</sup>

Aureolin Cobalt Yellow (PY40) - Slight toxicity, (Potassium Cobaltinitrite) Do not breathe dust. Do not spray apply.

Cerulean Blue Chromium (PB36) - Slight toxicity, (Cobalt chromite) Do not breathe dust. Do not spray apply.

Cobalt Blue (PB28) - Slight toxicity, (Cobalt aluminate) Do not breathe dust. Do not spray apply.

Cobalt Green (PG19) - Slight toxicity, (Cobalt green) Do not breathe dust. Do not spray apply.

Cobalt Turquoise (PG50) - Slight toxicity, (Cobalt titanate green) Do not breathe dust. Do not spray apply.

Cobalt Violet (PG50) - Slight toxicity, (Cobalt titanate green) Do not breathe dust. Do not spray apply.

Delft Blue (PB60) - Slight toxicity, (Indanthrone) Do not breathe dust. Do not spray apply.

Greenish Umber (PBk11, PB27, PBr7) - Slight toxicity, (Iron oxide black; Beta copper phthalocyanine; Brown Iron Oxide) Do not breathe dust. Do not spray apply.

Manganese Violet (PV16) - Slight toxicity, (Ammonium manganese diphosphate) Do not breathe dust. Do not spray apply.

Olive Green (PB27, PY150, PR83) - Slight toxicity, (Beta copper phthalocyanine; Pigment Yellow 150; Alizarin crimson) Do not breath dust. Do not spray apply.

Phthalo Blue GS (PB27) - Slight toxicity, (Beta copper phthalocyanine) Do not breathe dust. Do not spray apply.

Prussian Blue (PB27) - Slight toxicity, (Beta copper phthalocyanine) Do not breathe dust. Do not spray apply.

Prussian Green (PB27, PY150) - Slight toxicity, (Beta copper phthalocyanine; Pigment Yellow 150) Do not breathe dust. Do not spray apply.

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<sup>2</sup> The Art & Creative Materials Institute, Inc., 1280 Main Street, P.O. Box 479, Hanson, MA 02341



**Pigments with “no significant toxicity”**

These products are “AP Approved” by ACMI

Alizarin Crimson (PR83) - No significant toxicity, (Alizarin crimson).

Brilliant Blue (PB29, PB15) - No significant toxicity, (Polysulfide of sodium, potassium, lithium or silver alumino-silicate; Copper phthalocyanine).

Brilliant Green (PY73, PG7, PW4) - No significant toxicity, (Pigment yellow 73; Phthalocyanine Green; Zinc oxide).

Burnt Sienna (PR101) - No significant toxicity, (Ferric oxide).

Burnt Umber (PBr7) - No significant toxicity, (Brown Iron Oxide).

Cadmium Orange Hue (PY1; PO43, PW4) - No significant toxicity, (Hansa Yellow G; Vat orange 7; Zinc oxide).

Cadmium Red Hue (PY73; PR112; PW4) - No significant toxicity, (Pigment yellow 73; Pigment red 112, Zinc oxide).

Cadmium Yellow Hue (PY73; PW4) - No significant toxicity, (Pigment yellow 73; Zinc oxide).

Cerulean Blue Hue (PB15, PW4) - No significant toxicity, (Copper phthalocyanine; Zinc oxide).

Chromium Oxide Green (PG17) - No significant toxicity, (Chromium sesquioxide).

Cobalt Blue Hue (PB29) - No significant toxicity, (Polysulfide of sodium, potassium, lithium or silver alumino-silicate).

Davey's Gray (PY42, PBk7, PBk19) - No significant toxicity, (Hydrated ferric oxide; Iron and manganese oxides; Hydrated aluminum silicate).

Dioxazine Purple (PV23RS) - No significant toxicity, (Fast violet RL).

French Ultramarine Blue (PB29) - No significant toxicity, (Polysulfide of sodium, potassium, lithium or silver alumino-silicate).

Green Earth Hue (PB15, PY43, PBk9) - No significant toxicity, (Copper phthalocyanine; Hydrated ferric oxide; Bone black).



Hansa Yellow Light (PY73, PW4) - No significant toxicity, (Pigment yellow 73; Zinc oxide).

Indian Yellow (PY153, PR101) - No significant toxicity, (Nickel dioxime; Calcined synthetic red iron oxide).

Indigo (Vat Blue1) - No significant toxicity, (Indigo blue).

Ivory Black (PBk9) - No significant toxicity, (Bone Black).

Mars Black (PBk11) - No significant toxicity, (Iron oxide black).

Mars Ivory Black (PBk11, PBk9) - No significant toxicity, (Iron oxide black; Bone black).

Mars Yellow (PY42) - No significant toxicity, (Yellow iron oxide).

Naphthol Red Light (P112, PW4) - No significant toxicity, (Monoazo, naphthol; Zinc oxide).

Naples Yellow Hue (PY42, PW4, PY75, PY73, PW6, PO43) - No significant toxicity, (Yellow iron oxide; Zinc oxide; Permanent yellow; Pigment yellow 73; Titanium dioxide; Vat orange 7).

Payne's Gray (PBk9, PB29) - No significant toxicity, (Bone black; Polysulfide of sodium, potassium, lithium or silver alumino-silicate).

Permanent Alizarin Crimson (PR177) - No significant toxicity, (Anthraquinone red).

Permanent Alizarin Purple (PR177, PV23RS) - No significant toxicity (Anthraquinone red; Dioxazine).

Permanent Alizarin Purple (PR177) - No significant toxicity, (Anthraquinone red).

Permanent Green (PG7, PW4) - No significant toxicity, (Phthalocyanine green; Zinc oxide).

Permanent Green Light (PY3, PG7, PW4) - No significant toxicity, (Fast yellow 10G; Phthalocyanine green; Zinc oxide).

Permanent Sap Green Deep (PG7, PY139) - No significant toxicity, (Polychlorinated copper phthalocyanine; Isoindoline).

Phthalo Blue Green Shade (PB15) - No significant toxicity, (Copper phthalocyanine)



- Phthalo Green BS (PG7) - No significant toxicity, (Phthalocyanine Green).
- Priming White (PW4, PW6) - No significant toxicity, (Zinc oxide; Barium sulfate).
- Quinacridone Red (PV19) - No significant toxicity, (Quinacridone).
- Quinacridone Rose (PV19) - No significant toxicity, (Quinacridone).
- Quinacridone Violet (PV19) - No significant toxicity, (Quinacridone).
- Raw Sienna (PBr7) - No significant toxicity, (Brown iron oxide).
- Raw Umber (PBr7) - No significant toxicity, (Brown iron oxide).
- Rose Madder Hue (PR83) - No significant toxicity, (Alizarin crimson).
- Sap Green Hue (PG7, PBk9, PY75) - No significant toxicity, (Phthalocyanine green; Bone black; Permanent yellow).
- Terra Rosa Hue (PR101) - No significant toxicity, (Ferric oxide).
- Titanium White (PW6) - No significant toxicity, (Titanium dioxide).
- Transparent Gold Ochre (PY43, PY42, PR101, PBr7) - No significant toxicity, (Hydrated ferric oxide; Yellow iron oxide; Hydrated ferric oxide; Ferric oxide; Brown iron oxide).
- Transparent Iron Oxide Red (PR101) - No significant toxicity, (Ferric oxide).
- Ultramarine Blue (PB29) - No significant toxicity, (Polysulfide of sodium, potassium, lithium or silver alumino-silicate).
- Ultramarine Violet (PV15) - No significant toxicity, (Polysulfide of sodium, potassium, lithium or silver alumino-silicate).
- Unbleached Titanium (PBr7, PW6, PW4) - No significant toxicity, (Brown iron oxide; Titanium dioxide; Zinc oxide).
- Utrecht White (PW4, PW6) - No significant toxicity, (Zinc oxide; Titanium dioxide).
- Van Dyke Brown (PBr8) - No significant toxicity, (Ferric oxide, Manganese oxide).
- Venetian Red (PR101) - No significant toxicity, (Ferric oxide).
- Viridian (PG18) - No significant toxicity, (Chromium oxide hydrate).



Yellow Green (PG7, PY3, PW4) - No significant toxicity, (Phthalocyanine green; Hansa yellow 10G; Zinc oxide).

Yellow Ochre (PY43, PY42) - No significant toxicity, (Yellow iron oxide; Natural yellow iron oxide).

Zinc White (PW4) - No significant oxide, (Zinc oxide).

Zinc Yellow Hue (PY3, PW4) - No significant toxicity, (Fast yellow 10G; Zinc oxide).