

MATERIAL SAFETY DATA SHEET  
Utrecht Pure Artists' Pigment Colors



MSDS 920.1  
Date: March 15, 2011

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 Pure Artists' Pigment Colors

<i>Item</i>	<i>Color name</i>
20849	Burnt Sienna
20848	Burnt Umber
20845	Cadmium Orange
20843	Cadmium Red Medium
20846	Cadmium Yellow Lemon
20850	Cerulean
20841	Cobalt Blue
20851	Ivory Black
20856	Quinacridone Red
20847	Raw Sienna
20844	Titanium White
20842	Ultramarine Blue

Pigments are available in 4-ounce jars.

See Appendix A for the list of these pigments and their associated toxicity.

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

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*General statement of toxicity*

Pigment toxicity ranges from essentially non-toxic to potentially toxic if exposed by inhalation. By example, pigments based on cadmium compounds are potentially harmful if inhaled. Respiratory protection should be used whenever these dry pigments are handled.



#### *Toxicity associated with pigments*

Pigment toxicity is noted in Appendix A. Pigments based on compounds *Known to the State of California to Cause Cancer or Reproductive Toxicity* under PROP 65<sup>1</sup> are noted.

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

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Appendix A lists Utrecht Artists' Pigment Colors. Toxicity reflects the hazard of each pigment. The Risk Characterization for each pigment is noted in the preamble to Appendix A. In general, there is low risk of toxicity from skin exposure. Pigments composed of cadmium compounds should not be inhaled; thus, the guidance "Wear respiratory protection when handling."

Cadmium has the following regulatory exposure limits:

Occupational Inhalation Exposure, OSHA<sup>2</sup>  
5 µg/m<sup>3</sup> PEL (permissible exposure limit)

Water Consumption, EPA<sup>3</sup>  
*Standard*  
0.005 mg/L

*Health Advisories*  
0.04 mg/L 1-day exposure for 10 kg child  
0.02 mg/L Drinking Water Equivalent Level (DWEL)  
0.005 mg/L Lifetime

Oral Exposure, EPA<sup>3</sup>  
*Reference Dose*  
0.0005 mg/kg/day

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

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For overexposure due to accidental ingestion or inhalation, seek medical attention. Adverse effects from incidental skin exposure are not expected.

Inhalation      If person inhales dry pigment particles remove person to fresh air. Seek medical help.  
Ingestion        Treat symptomatically; do not induce vomiting; seek medical help.  
Skin Contact    Wash skin with soap and water.  
Eye Contact     Flush eyes for up to 15 minutes with water; if irritation persists, seek medical help.

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

<sup>2</sup> Occupational Safety and Health Administration, 29 CFR 1910.1027, May 5, 2008 (Time Weighted Average as Cd).

<sup>3</sup> 2006 Edition of the Drinking Water standards and Health Advisories, US EPA, EPA 822-R-06-013, August 2006.



## Section 5 – Fire Fighting Measures

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Utrecht Pure Artists' Pigments generally are not combustible.

Flash point, °C: NA  
Auto-ignition Temperature: NA  
Lower explosive limit: NA  
Upper explosive limit: NA  
Extinguishing media: Carbon dioxide, foam, dry chemical

## Section 6 – Accidental Release Measures

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

## Section 7 – Handling and Storage

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Work with these dry pigments only where air currents are minimal; that is, away from air conditioners, air vents or other apparatus that generates air movement.

Wear respiratory protection when handling, (particularly for cadmium based pigments).

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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When handling Utrecht Pure Artists' Pigment Colors wear respiratory protection to prevent lung exposure. Disposable gloves are recommended to minimize skin contact. Wash hands to remove skin exposure, should it occur.

## Section 9 – Physical/Chemical Properties

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Utrecht Pure Artists' Pigment Colors are composed of compounds listed in Appendix A.

## Section 10 – Stability and Reactivity

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Utrecht Artists' Pigment Colors are considered stable and non-reactive.



## **Section 11 – Toxicology Information**

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Utrecht Artists' Pigment Colors have toxicity. Some pigments have a risk of adverse effects if excessive inhalation exposure occurs.

### *Toxicity associated with specific heavy metal based pigments*

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)

## **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 are not available.

## **Section 13 – Disposal Considerations**

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Under typical use situations, pigments should be used up rather than disposed.

## **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 Utrecht Pure Artists' Pigment Colors are determined through a process of risk characterization.

This process first identifies the hazard of the material, (that is, the inherent toxicity of the chemical compound comprising the pigment), and the dose-response, (that is, the relationship of toxicity to systemic dose). The systemic dose is milligrams, (mg), 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 Utrecht Pure Artists' Pigment Colors, 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. Inhalation exposure is minimized by the use of respiratory protection.

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 Pure Artists' Pigment Colors, 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 Utrecht Pure Artists' Pigment Colors along with their Color Index. The risk characterization is noted and the primary chemical component(s) upon which this risk is based is noted in parentheses.

All Utrecht Pure Artists' Pigment Colors are judged safe for use in formulating paints when respiratory protection is worn. 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: "Wear respiratory protection when handling." 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 Pure Artists' Pigment Colors 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. Since dust can be generated when manipulating these dry pigments, respiratory protection is recommended. This is particularly important for cadmium-based pigments.



**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 Orange: Cadmium Sulfoselenide Orange, CAS 12656-57-4). Wear respiratory protection when handling.

Cadmium Red Medium (PR108) - Slight toxicity, (Cadmium Red: Cadmium Sulfoselenide Red, CAS 58339-34-7). Wear respiratory protection when handling.

Cadmium Yellow Lemon (PY35) - Slight toxicity, (Cadmium Yellow: Cadmium Zinc Sulphide, CAS 8048-07-5). Wear respiratory protection when handling.

Cerulean Blue (PB35) - Slight toxicity, (Cobalt Stannate, CAS 1345-19-3). Wear respiratory protection when handling.

Cobalt Blue (PB28) - Slight toxicity, (Cobalt Blue Spinel: Cobalt Aluminate, CAS 1345-16-0). Wear respiratory protection when handling.

**Pigments with "slight toxicity"**

These products are "AP Approved" by ACMI<sup>4</sup>

Burnt Sienna (PBr7) - No Significant toxicity, (Italian Earth: Iron oxide, CAS 12713-03-0).

Burnt Umber (PBr7) - No Significant toxicity, (Burnt Umber: Iron oxide, CAS 12713-03-0).

Ivory Black (PBk9) - No Significant toxicity, (Bone black: Carbon, CAS 8021-99-6).

Quinacridone Red (PV19) - No Significant toxicity, (Quinacridone Red: Quinacridone, CAS 1047-16-1).

Raw Sienna (PBr7) - No Significant toxicity, (Natural brown iron oxide, CAS 12713-03-0).

Titanium White (PW6) - No Significant toxicity, (Titanium dioxide, CAS 12463-67-7).

Ultramarine Blue (PB29) - No Significant toxicity, (Polysulfide of sodium, potassium, lithium or silver alumino-silicate, CAS 1317-97-1).

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<sup>4</sup> The Art & Creative Materials Institute, Inc., 1280 Main Street, P.O. Box 479, Hanson, MA 02341