# MATERIAL SAFETY DATA SHEET Utrecht Artists' Acrylic Colors



MSDS 901.4 Date: June 7, 2010

Information: 800-223-9132

or: 609-409-8002

# **Section 1 – Company and Product Identification**

Utrecht Art Supply 6 Corporate Drive Cranbury, NJ 08512

Product Line: Utrecht Artists' Acrylic Colors

5003 Utrecht Artists' Acrylics Color Theory Set

5004 Utrecht Artists' Acrylics Portrait Set

5005 Utrecht Artists' Acrylics Landscape Set

5006 Utrecht Complete Artists' Acrylic Painting Set

5007 Utrecht Artists' Acrylics Wood Box Set

5009 Utrecht Artists' Acrylics Basic Color Set

Container sizes are generally 2 ounce, 5 ounce, pint and gallon.

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

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

#### General statement of toxicity

Utrecht Artists' Acrylic Colors 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.

### Formulation overview

Utrecht Artists' Acrylic Colors are formulated with acrylic binder, pigment and other proprietary components. A typical formula may include 50% acrylic binder plus co-polymer, 30% pigment and 20% proprietary ingredients.

#### *Toxicity associated with pigments*

Pigment toxicity reflects individual chemical components. These are noted in Appendix A.



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

Appendix A lists Utrecht Artists' Acrylic Colors pigments. Toxic risks reflect inherent component hazards with the 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 breath dust. Do not spray apply." While specific to such pigments, this guidance applies to all artist paints in general.

#### Section 4 – First Aid Measures

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 Remove to fresh air; if subject is unresponsive seek immediate 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.

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

The acrylic paints are water-based and do not represent significant fire hazards.

Flash point, °C: NA Autoignition Temperature: NA Lower explosive limit: NA Upper explosive limit: NA

Extinguishing media: Carbon dioxide, foam, dry chemical

#### **Section 6 – Accidental Release Measures**

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

Store at room temperature.

Do not contaminate food products.

Wash hands after use.

Avoid eye contact.

### **Section 8 – Exposure Control/Personal Protection**

Normal usage of Utrecht Artists' Acrylic Colors does not require special Personnel Protection Equipment (PPE). Wash hands to remove skin exposure, should it occur.

### Section 9 – Physical/Chemical Properties

Utrecht Artists' Acrylic Colors are water-based formulations incorporating a variety of pigments (see Appendix A).

## Section 10 – Stability and Reactivity

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

### Section 11 – Toxicology Information

Utrecht Artists' Acrylic Colors 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 acrylic 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: Possible carcinogen; may cause lung and kidney damage.

#### Section 12 – Ecological Information

Toxicity to animals, fish and insects are not available.

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

## Section 13 – Disposal Considerations

Under typical use situations, Utrecht Artists' Acrylic Colors should be used up rather than disposed. If discarded, these products are not considered hazardous waste in the usual volumes available; however, minimize environmental contamination. In general, first wipe brushes on a rag or paper towel, then rinse in a small container of water and wipe again on a rag or paper towel. For final cleaning, use three containers consisting of soapy water, an initial rinse and a final rinse. Dispose of liquid waste in accordance with local regulations. Where buildup of such compounds as cadmium, barium, lead, chromium, cyanide, selenium or mercury is suspected, the waste water should be treated as Hazardous Waste in accordance with local regulations.

## Section 14 - Transport Information

No restrictive Department of Transportation requirements; not hazardous for shipping.

### Section 15 – Regulatory Information

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**

MSDS prepared by Elliot Gordon, PhD, DABT, Elliot Gordon Consulting, LLC, 55 Lillie Street, Princeton Junction, NJ 08550 (609-936-1977; ebgfox@comcast.net).

Date of MSDS/revision: June 7, 2010

## **Appendix A: Pigments and Associated Toxicity**

#### 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 artist paints, is generally the amount deposited on the skin and the subsequent absorption into the blood of the paint components. 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 Artists' Acrylic 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 acrylic 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 Artists' Acrylic Colors are judged safe for use under typical studio and educational settings. Where "slightly" toxic 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 breath dust. Do not spray apply."



## Appendix A

## Utrecht Artists' Acrylic Colors with "slight toxicity"

- Aureolin Cobalt Yellow (PY40) Slight toxicity, (Potassium Cobaltinitrite) Do not breathe dust. Do not spray apply.
- Cadmium Green (PG7, PY37) Slight toxicity, (Phthalocyanine green; Cadmium sulfide) Do not breathe dust. Do not spray apply.
- 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 Extra 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 Deep (PO20) Slight toxicity, (Cadmium sulfoselenide orange) 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 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.
- Delft Blue (PB60) Slight toxicity, (Indanthrone) Do not breathe dust. Do not spray apply.

## Utrecht Artists' Acrylic Colors with "no significant toxicity"

These products are "AP Approved" by ACMI<sup>1</sup>

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

Azo Yellow Medium (PY73) - No significant toxicity, (Pigment yellow 73).

Azo Yellow Orange (PY1) - No significant Toxicity, (Hansa yellow G).

Bright White (PW28) - No significant toxicity, (Calcium silicate).

Brilliant Blue (PB15:3) - No significant toxicity, (Copper phthalocyanine).

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

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

Burnt Sienna (PBr7) - No significant toxicity, (Brown iron 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 Orange Hue (PY1; PO43) - No significant toxicity, (Hansa Yellow G; Vat orange 7).

<sup>&</sup>lt;sup>1</sup> The Art & Creative Materials Institute, Inc., 1280 Main Street, P.O. Box 479, Hanson, MA 02341

- Cadmium Red Hue (PY73, PR117, PW4) No significant toxicity, (Pigment yellow 73; Pigment red 177; 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).
- Cadmium Yellow Hue (PY73) No significant toxicity, (Pigment yellow 73).
- Cadmium Yellow Lemon (PY73) No significant toxicity, (Pigment yellow 73).
- Cerulean Blue Hue (PB15, PW4) No significant toxicity, (Copper phthalocyanine; Zinc oxide).
- Cerulean Blue Hue (PB15, PW6) No significant toxicity, (Copper phthalocyanine; Titanium dioxide).
- 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).
- Dioxazine Purple (PV23RS) No significant toxicity, (Fast violet RL).
- Emerald Green (PG7, PY97, PW6) No significant toxicity, (Phthalocyanine green; Pigment yellow 97; Titanium dioxide).
- French Ultramarine Blue (PB29) No significant toxicity, (Polysulfide of sodium, potassium, lithium or silver alumino-silicate).
- Hansa Yellow Light (PY73) No significant toxicity, (Pigment yellow 73).
- Hansa Yellow Pale (PY3) No significant toxicity, (Fast yellow 10G).
- Hooker's Green Hue (PG7, PY42, PR101) No significant toxicity, (Phthalocyanine green; Yellow iron oxide; Ferric oxide).
- Indo Orange Red (PO43) No significant toxicity, (Vat orange 7).
- Iridescent Antique Bronze No significant toxicity, (Synthetic coated mica).
- Iridescent Antique Copper No significant toxicity, (Synthetic coated mica).

Iridescent Antique Gold - No significant toxicity, (Synthetic coated mica).

Iridescent Antique Silver - No significant toxicity, (Synthetic coated mica).

Iridescent Bronze - No significant toxicity, (Synthetic coated mica).

Iridescent Copper - No significant toxicity, (Synthetic coated mica).

Iridescent Gold - No significant toxicity, (Synthetic coated mica).

Iridescent Russet - No significant toxicity, (Synthetic coated mica).

Iridescent Silver - No significant toxicity, (Synthetic coated mica).

Iridescent White - No significant toxicity, (Synthetic coated mica).

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

Light Portrait Pink (PW6) - No significant toxicity, (Titanium dioxide).

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).

Medium Gray (PBk9, PBr7, PW6) - No significant toxicity, (Bone black; Brown iron oxide; Titanium dioxide).

Naphthol Crimson (PR170) - No significant toxicity, (Fast Red F3RK).

Naphthol Red Light (PR112) - No significant toxicity, (Pigment red 112).

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

Permanent Bronze - No significant toxicity, (Synthetic coated mica).

Permanent Gold - No significant toxicity, (Synthetic coated mica).

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, (Phthalocyanine Green; Isoindoline yellow).

Permanent Silver - No significant toxicity, (Synthetic coated mica).

Pernament Green (PG7, PY3) - No significant toxicity, (Phthalocyanine Green; Fast yellow 10G).

Pernament Violet (PV15, PV23RS) - No significant toxicity, (Sodium aluminium sulfosilicate; Fast violet RL).

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

Phthalo Green Shade (PG7) - No significant toxicity, (Phthalocyanine Green).

Quinacridone Red (PV19RS) - No significant toxicity, (Quinacridone).

Quinacridone Rose (PV19) - No significant toxicity, (Quinacridone).

Quinacridone Violet (PV19RS) - No significant toxicity, (Quinacridone).

Raw Sienna (PBr7) - No significant toxicity, (Brown iron oxide).

Raw Umber (PBr7) - No significant toxicity, (Brown iron oxide).

Sap Green Hue (PG7, PBk9, PY75) - No significant toxicity, (Phthalocyanine green; Bone black; Permanent yellow).

Titanium White (PW6) - No significant toxicity, (Titanium dioxide).

Turquoise (PG7, PB15) - No significant toxicity, (Phthalocyanine Green; Copper phthalocyanine).

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

Ultramarine Violet (PV15) - No significant toxicity, (Sodium aluminium sulfosilicate).

Unbleached Titanium (PBr7, PW6, PW4) - No significant toxicity, (Brown iron oxide; Titanium dioxide; Zinc oxide).

Venetian Red (PR101) - No significant toxicity, (Ferric oxide).

Viridian (PG18) - No significant toxicity, (Chromium oxide hydrate).



Viridian Hue (PG7, PBr7, PW6) - No significant toxicity, (Phthalocyanine green; Brown iron oxide; Titanium dioxide).

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

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

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