
§5. FIRE AND EXPLOSION HAZARD DATA

Flammability : N/A
 Flash Point, Ignition Point : N/A
 Combustion Products : Formation of carbon dioxide and oxide of metal according to pigment.
 Extinguishing Method : Regular
 Extinguishing Media : Water (Foam, Dry powder and Carbon dioxide, if necessary)
 Precaution for Firefighters : Do not inhale combustion gases.

§6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures : Wipe off.
 Environmental Precautions : Prevent spills from entering storm sewers or drains and contact with soil.

§7. HANDLING AND STORAGE

Precautions for Storing : None, especially

§8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Avoid invasion to the eyes or body. Avoid prolonged or repeated contact with skin.
 Wash mouth or hands well after use. Avoid inhaling aerosols.

§9. PHYSICAL / CHEMICAL CHARACTERISTICS

Appearance and Odor : Colored Paste with unique odor
 Specific Gravity (H₂O = 1) : 1.1~2.0 (Av. 1.45)
 Boiling Point : Approx. 100°C
 Vapor Density (Air = 1) : —
 Vapor Pressure (Butyl Acetate = 1) : ≒ Water

Solubility in Water : Can be diluted. Can be influenced after dried.

§10. HAZARD INFORMATION AND STABILITY

Physical Dangers : Nonflammable on product.
 Stability : Stable under normal state
 Reactivity : None
 Byproducts : Carbon dioxide, oxides of metals and water in case of fire.
 No thermal decomposition when stored and handled correctly.
 Incompatibility (Materials to Avoid) : None

§11. TOXICOLOGICAL INFORMATION

Primary Routes of Entry : Dermal, eye contact, inhalation, swallowing
 Oral Toxicity : Although some of raw materials are pointed as some toxicity, the toxic acts of them are not acute.
 Toxicity of Gouache themselves is not confirmed.

On pigments, to be noted. :

Colors named with Cadmium, Jaune Brillant #1 & #2, Naples Yellow, :
 Contains Cadmium ingredient, influences to fetus,
 induce kidney or lungs damage.

Cobalt Blue, Cerulean Blue, Cobalt Violet : Contains soluble Cobalt, induce
 anemia and heart or lungs damage.

Jet Black : Soluble Copper, induce anemia

Violet, Blue Violet, Magenta, Opera :
 Contains formaldehyde, irritant, allergen, carcinogen

(See Appendix, Table COLOR INFORMATION)

Eye irritation : Irritant to some person, but do not damage the organization

Skin irritation : Irritant by repeated or prolonged contact, and may cause inflammation.

Inhalation Toxicity : Although some of raw materials are pointed to may stimulate eyes and respiratory organs with their vapor or mists under highly concentrated state, the toxic act of gouache is not confirmed.

Carcinogenicity, Sensitization, Mutagenicity, Teratogenicity, Reproductive Toxicity :
 No data available on products.

§12. ECOLOGICAL INFORMATION

Fish Toxicity : Not been certified.

§13. DISPOSAL CONSIDERATIONS

Disposal Considerations : Dispose in accordance with national and/or local regulations.
 Avoid entry into the sewage system (danger of clogging).

§14. TRANSPORT INFORMATION

Precautions for Transport : None, especially

UN Class : N/A

UN Number : N/A

§15. REGULATORY INFORMATION

Danger Class : N/A (Not flammable liquid)

Fire Service Law : N/A

Industrial Safety and Health Law : N/A

Pollutant Release and Transfer Register : N/A

Conforms to ACMI, Art & Creative Materials Institute, under ASTM D 4236. (See Appendix)

§16. OTHER INFORMATION

Notice : All information contained herein is for references and guidance for normal use, and not for all conceivable conditions of handling and use. The responsibility for irregular use belongs to user individuals. All information of this sheet is based on the present state of our knowledge and does not therefore guarantee certain properties. All information may change according to circumstances.

Appendix

Table COLOR INFORMATION

Name	Hazardous ingredient	Classification	Name	Hazardous ingredient	Classification
Alizarin Crimson	-	AP	Opera	-	AP
Aqua Blue	-	AP	Peacock Blue	-	AP
Ash Blue	-	AP	Pearl Copper	-	AP
Ash Green	-	AP	Pearl Gold	-	AP
Blue Violet	-	AP	Pearl White	-	AP
Brilliant Gold	-	AP	Perm Green Deep	-	AP
Brilliant Orange	-	AP	Perm Green Light	-	AP
Brilliant Pink	-	AP	Perm White	-	AP
Brilliant Silver	-	AP	Perm Yellow	-	AP
Burnt Sienna	-	AP	Perm Yellow Deep	-	AP
Burnt Umber	-	AP	Perm Yellow Orange	-	AP
Cad Green	Cd	AP	Pink	-	AP
Cad Green Deep	Cd	AP	Primary Black	-	AP
Cad Green Pale	Cd	AP	Primary Cyan	-	AP
Cad Red	Se-Cd	AP	Primary Magenta	-	AP
Cad Red Deep	Se-Cd	AP	Primary White	-	AP
Cad Red Purple	Se-Cd	AP	Primary Yellow	-	AP
Cad Yellow	Cd	AP	Prussian Blue	-	AP
Cad Yellow Lemon	Cd	AP	Pure Blue	-	AP
Cad Yellow Orange	Se-Cd	AP	Pure Red	-	AP
Carmin	-	AP	Raw Sienna	-	AP
Cerulean Blue	Co	AP	Raw Umber	-	AP
Chinese Orange	-	AP	Rich Gold	-	AP
Cobalt Blue	Co	AP	Rose	-	AP
Cobalt Green Pale	Co	AP	Rose Violet	-	AP
Cobalt Turquoise	Co	AP	Sepia	-	AP
Cobalt Violet	Co	CL	Silver	-	AP
Cyprus Green	-	AP	Smalt Blue	-	AP
Dark Green	-	AP	Terre Verte	-	AP
Emerald Green	-	AP	Turquoise Blue	Co	AP
Flame Red	-	AP	Turquoise Green	-	AP
Geranium	-	AP	Ultra Deep	-	AP
Grey #1	-	AP	Ultra Light	-	AP
Grey #2	-	AP	Violet	-	AP
Grey #3	-	AP	Viridian	-	AP
Ice Blue	-	AP	Yellow Ochre	-	AP
Iris	-	AP	Zinc White	-	AP
Ivory Black	-	AP			
Jaune Brillant #1	Se-Cd	AP			
Jaune Brillant #2	Se-Cd	AP			
Jet Black	Cu	CL			
Katsura Blue	-	AP			
Leaf Green	-	AP			
Lemon Yellow	-	AP			
Lilac	-	AP			
Magenta	-	AP			
Marigold	-	AP			
Moss Green	-	AP			
Naples Yellow	Cd	AP			
Naples Yellow Italian	Cd	AP			
Navy Blue	-	AP			
Olive Green	-	AP			

Cd : Cadmium
 Co : Cobalt
 Cu : Copper
 Se-Cd : Selenium-Cadmium

AP (Approved Product) : Contain no materials in sufficient quantities to be toxic or injurious to humans.
 CL (Cautionary Label) : Any known health risks and with information on the safe and proper use of these materials