



# Standard Guide for Artists' Paint Waste Disposal in Private, Non-Commercial Settings<sup>1</sup>

This standard is issued under the fixed designation ; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This guide establishes recommendations for the safe and environmentally friendly clean up and disposal of artists' paints and by-products of their use in a private, non-commercial setting.

1.2 The values stated in inch-pound units are to be regarded as standard. No other units of measurement are included in this standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

## 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

[D4302 Specification for Artists' Oil, Resin-Oil, and Alkyd Paints](#)

[D5067 Specification for Artists' Watercolor Paints](#)

[D5098 Specification for Artists' Acrylic Dispersion Paints](#)

## 3. Terminology

3.1 *Definitions:*

3.1.1 *grounding and bonding, v*—connecting and grounding containers to provide an electrically conductive path to reduce the risk of static and spark between the items, therefore, reducing the risk of fire or explosion in a flammable atmosphere or environment.

3.1.2 *organic solvents, n*—non-aqueous liquid substances capable of dissolving other substances; for artist's paints, these may include mineral spirits, turpentine, other petroleum and non-petroleum based solvents, and vegetable oil.

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.57 on Artist Paints and Related Materials.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3.2 *Notes:*

3.2.1 Household Hazardous Waste Collection Site — Over 3000 collection programs have been undertaken in the United States. Check with the local chamber of commerce, county, or state environmental or solid waste agency to see if there is a household hazardous waste collection program in your area. These collection sites typically have no fees or charges for use by local non-commercial waste generators.

## 4. Summary of Guide

4.1 This guide establishes recommendations for the environmentally responsible clean up and disposal of waste produced by users of artists' paint products and solvents.

4.2 Several pigments listed in Specification [D4302](#) for inclusion in artists' oil, resin-oil, and alkyd, Specification [D5067](#) for artists' watercolor paints, and Specification [D5098](#) for artists' acrylic dispersion paints are materials that the United States Environmental Protection Agency (EPA) considers hazardous waste when disposed of or released to the environment due to toxic pigment used in some paints. These toxic pigments are capable of groundwater contamination.

4.3 The solvents used with the artists' paints may also be hazardous waste when disposed of or released to the environment due to their flammability and toxicity. The addition of a hazardous pigment to an organic solvent or water may make the mixture also hazardous to the environment. Evaporation of these organic solvents also harms human health and the environment.

4.4 These hazardous materials should be managed and stored carefully to prevent exposure to the user and disposed of in a responsible manner to prevent harm to the environment such as by taking them to a household hazardous waste collection site.

## 5. Significance and Use

5.1 This guide establishes recommendations for the environmentally responsible clean up and disposal of waste produced by users of artists' paint products and solvents. It does not supersede laws or regulations, but recommends prudent practices.

5.2 This guide's use should be limited to artists whose work is not creating income. Artists who are in business or in other

commercial or educational settings will usually be required to meet specific regulatory requirements.

## 6. Procedure

6.1 For artists' paint which use other than water as a solvent, including organic solvents, linseed oil, or vegetable oil, the following procedures are appropriate for brush cleaning when using these paints:

6.1.1 Rinse brushes in a small (less than 8 oz), closable container of the appropriate solvent, such as mineral spirits. Label collection containers of hazardous waste properly. Labels should include the words "Hazardous Waste," identify the contents, that is, "mineral spirits" and state all hazards posed by the collected waste (for example, flammability, corrosivity, etc.).

6.1.2 Wipe brushes of all paint and solvent residue on a rag or paper towel.

6.1.3 Rinse brushes of remaining paint and solvent residue in ordinary vegetable oil. Wipe brushes on a rag or paper towel.

6.1.4 Rags and paper towels should be collected. Rags or paper towels contaminated with vegetable drying oils, particularly those containing iron oxide pigments are susceptible to spontaneous combustion. Proper handling and disposal of rags and paper towels is covered in 6.1.6.

6.1.5 When the solvent is too saturated to effectively clean brushes, pour it and any paint pigment into a labeled collection container. The collection container should be appropriate for flammable liquids (fire safety can) and remain tightly closed except when adding material. Transferring solvents should be done in a well-ventilated area and grounding and bonding procedures should be practiced.

6.1.5.1 This waste material should be disposed of through a local household hazardous waste collection site. Never release the material into the environment and do not evaporate the solvent as this can lead to exposure to the solvent and possibly cause adverse health effects and harm the environment.

6.1.5.2 Take precautions to prevent accidental ignition or reaction of ignitable or reactive wastes. Do not store flammable liquids near a flame or heat source.

a) Keep all collection containers closed, unless material is being added. Handle all containers carefully to prevent rupture or leakage. Properly label collection containers of hazardous waste. Labels should include the words "Hazardous Waste," identify the contents, that is, "mineral spirits and paint possibly containing cadmium, barium, lead, chromium, cyanide, selenium, and mercury" and state any hazards, such as "flammable." This will allow the material to be easily identified for appropriate disposal method or proper response in case of a spill.

6.1.6 Used rags or paper towels that contain solvents or pigment should be collected in closeable, airtight container. The possibility of spontaneous combustion exists with this material, so air must be kept out of the container. A fire safety-can should be considered for a collection container. Label the collection container with the words "Hazardous Waste," contents of the container, that is, "mineral spirits and paint possibly containing cadmium, barium, lead, chromium,

cyanide, selenium, and mercury" and an appropriate hazard warning, such as "flammable."

6.1.7 Collected rags and towels wastes with solvent or pigment should be disposed of through a local household hazardous waste collection site.

6.2 For artists' paints which use water as a solvent:

6.2.1 Wipe brushes of all paint on a rag or paper towel, then rinse brushes in small container of water (used for color changes and thinning). Wipe brushes of remaining paint on a rag or paper towel.

6.2.2 For final cleaning use three larger containers of water (1 quart to 5 gallon); the first container, Container A, first wash, soapy water, Container B, first rinse water, and Container C, final rinse water. Container size will depend on the number of persons using them and frequency of use. For a private individual, one-quart containers may be adequate, whereas five-gallon buckets may be appropriate for larger groups of people.

6.2.3 For brush cleaning wash with the soapy water in Container A. Rinse well in clean water in Container B. Finally, rinse in clean water Container C.

6.2.4 When rinse water becomes too dirty to effectively clean, discard small container of water into Container A.

6.2.5 Disposal and changing of the final cleaning containers: Container A's contents will be poured into a collection container. Container B's contents will be poured into Container A and soap added. Container C's content will be poured into Container B and Container C will have clean water added to it.

6.2.6 It is an acceptable practice to evaporate the water from the pigment residue, reducing the volume of waste. The solid pigment residue waste should be disposed of through a household hazardous waste collection site. In many areas the local authority may allow the water and pigment to be disposed of into the sink drain. Contact your local water/sewer authority or health department for more information. While this may be lawful, the environment will be better served if these materials are not released into the environment. The solution of water and paint pigment may be disposed of through a household hazardous waste collection site.

6.3 Used rags or paper towels that contain pigment should be collected in closeable, airtight container for disposal. Label the containers "Hazardous Waste," list contents, "waste rags with paint possibly containing cadmium, barium, lead, chromium, cyanide, selenium, and mercury." Keep container closed unless adding material to the container. This material may be disposed of through a local household hazardous waste collection site.

6.4 When discarding of canvases, palettes or other materials with residual pigments, use a container large enough to hold the material and still be closed or sealed. Label the container describing the hazardous contents, such as, "solid waste with paint possibly containing cadmium, barium, lead, chromium, cyanide, selenium, and mercury." Dispose of the waste through a household hazardous waste collection site.

## 7. Keywords

7.1 artists' paints disposal; hazardous waste; household hazardous waste disposal

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