



Designation: D 4297 – 05

## Standard Practice for Sampling and Handling Bisphenol A (4,4' -Isopropylidinediphenol)<sup>1</sup>

This standard is issued under the fixed designation D 4297; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope\*

1.1 This practice covers procedures for safely sampling and handling 4,4'-isopropylidinediphenol, commercially known as bisphenol A (BPA), in various solid forms, and as a liquid at elevated temperatures in a manner which represents and preserves product quality.

1.2 Any person sampling or handling this product should have consulted a Material Safety Data Sheet (MSDS) for specific first aid instructions and information on the proper equipment to have available for use in the event of personal contact or exposure.

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 *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. For specific hazard statements, see Section 8.*

### 2. Referenced Documents

#### 2.1 OSHA Regulations:

29 CFR Labor, paragraphs 1910.1000 and 1910.1200<sup>2</sup>

#### 2.2 U.S. DOT Regulations:

49 CFR Transportation, Subchapter C, Parts 171-180<sup>2</sup>

### 3. Significance and Use

3.1 This practice is issued to provide information useful in establishing sampling and handling procedures. It is expected that this information will only be utilized in conjunction with an existing health and safety program and consultation with an

appropriate MSDS. The information provided herein cannot be used as a substitute for expert safety and medical advice as provided in an appropriate MSDS, but rather as a supplement to such advice.

### 4. Description of Product (See Table 1)

4.1 Bisphenol A (BPA) is not classified as a hazardous chemical by the Department of Transportation, and is, therefore not subject to DOT regulations governing the transportation of hazardous articles. Bisphenol A is normally transported in several types of containers including cloth and paper bags, bulk trucks, and covered hopper cars. (See Table 1.)

4.2 While bisphenol A (BPA) is dangerous when handled improperly, particularly at elevated temperatures, its unloading need not be hazardous provided the hazards are recognized and handling instructions are rigidly observed as detailed here and in an appropriate MSDS.

### 5. Hazards

5.1 *Health*—Consult current OSHA regulations and supplier's Material Safety Data Sheets for all materials used in this practice.

5.1.1 Aside from the risk of thermal burns in handling BPA when molten, and a possibility of dermatitis from impurities, particularly in crude grades, industrial use does not present a significant health hazard. However, ordinary precautions must be observed to protect personnel from contact with molten BPA or excessive exposure to dusts or high concentrations of vapor.

5.1.2 Precautions must be observed to protect personnel from excessive inhalation of vapors and dust.

#### 5.2 Fire:

5.2.1 BPA in both the solid and liquid form is combustible and introduces a potential fire hazard when it is stored, handled, or used.

5.2.2 BPA vapors or dust can form explosive mixtures with air.

5.2.3 Dry chemicals, carbon dioxide, foam, and water can all be used in fighting fires involving BPA.

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee D16 on Aromatic Hydrocarbons and Related Chemicals and is the direct responsibility of Subcommittee D16.08 on Handling and Sampling Aromatic and Cyclic Hydrocarbons.

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<sup>2</sup> Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.

\*A Summary of Changes section appears at the end of this standard.