

Designation: D 1249 - 92 (Reapproved 1999)

# Standard Specification for Octyl Ortho-Phthalate Ester Plasticizers<sup>1</sup>

This standard is issued under the fixed designation D 1249; 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 specification covers octyl orthophthalate ester plasticizers, suitable for use in the compounding of plastics.

Note 1—There are no ISO standards covering the primary subject of this specification.

Note 2—The properties included in this specification are those required to identify the type of plasticizer covered. There may be other requirements necessary to identify particular characteristics. These will be added to this specification as their inclusion becomes desirable and the necessary test data and methods become available.

1.2 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:
- D 883 Terminology Relating to Plastics<sup>2</sup>
- D 1045 Methods of Sampling and Testing Plasticizers Used in Plastics<sup>2</sup>
- D 1600 Terminology for Abbreviated Terms Relating to Plastics<sup>2</sup>
- D 3892 Practice for Packaging/Packing of Plastics<sup>3</sup>
- E 203 Test Method for Water Using Karl Fischer Reagent<sup>4</sup>

## 3. Terminology

3.1 *General*—Definitions are in accordance with Terminology D 883 and abbreviations with Terminology D 1600, unless otherwise indicated.

#### 4. Classification

4.1 This specification covers two types of octyl orthophthalate ester plasticizers:

- 4.1.1 Type I, 2-ethyl hexyl phthalate ester, and
- 4.1.2 *Type II*, mixed *iso*octyl phthalate ester.

## 5. Chemical Requirements

5.1 The plasticizer shall conform to the requirements prescribed in Table 1.

## **6. Physical Requirements**

- 6.1 The plasticizer shall be substantially free of suspended matter.
  - 6.2 The odor of the plasticizer shall be mild.

## 7. Sampling and Test Methods

7.1 Sample and test the plasticizer in accordance with Methods D 1045 and determine moisture in accordance with Test Method E 203.

## 8. Retest and Rejection

8.1 If any failure occurs, the materials may be retested to establish conformity in accordance with agreement between the purchaser and the seller.

### 9. Packaging and Package Marking

- 9.1 Packaging—The material shall be packaged in standard commercial containers, so constructed as to ensure acceptance by common or other carriers for safe transportation at the lowest rate to the point of delivery, unless otherwise specified in the contract or order.
- 9.2 Package Marking—Shipping containers shall be marked with the name of the material, type, and the quantity contained therein, as defined by the contract or order under which shipment is made, the name of the manufacturer, and the number of the contract or order.
- 9.3 All packing, packaging, and marking provisions of Practice D 3892 shall apply to this specification.

#### 10. Keywords

10.1 octyl-ortho-phthalate ester; plasticizers

<sup>&</sup>lt;sup>1</sup> This specification is under the jurisdiction of ASTM Committee D-20 on Plastics and is the direct responsibility of Subcommittee D20.15 on Thermoplastic Materials (Section D20.15.07).

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<sup>&</sup>lt;sup>2</sup> Annual Book of ASTM Standards, Vol 08.01.

<sup>&</sup>lt;sup>3</sup> Annual Book of ASTM Standards, Vol 08.02.

<sup>&</sup>lt;sup>4</sup> Annual Book of ASTM Standards, Vol 15.05.