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## Standard Test Method for PARTICULATE MATTER IN TRICHLOROTRIFLUOROETHANE<sup>1</sup>

This standard is issued under the fixed designation D 3979; 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.

### A. SAMPLING

#### 1. Scope

1.1 This test method covers the sampling of ultra-clean grade solvent from 55-gal drums and tank trucks.

1.2 Since a heterogeneous sample is being taken, thorough agitation during sampling is necessary. Care must be exercised in avoiding contamination from the surroundings.

1.3 *This standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of whoever uses this standard to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. A specific precautionary statement is given in Section 6.*

#### 2. Summary of Method

2.1 Instructions are given for sampling of ultra-clean grade solvent so that a representative sample of particulate matter will be obtained.

#### 3. Significance and Use

3.1 This test method can be employed to obtain representative samples for the determination of particulate matter in trichlorotrifluoroethane from 55-gal drums and tank trucks.

#### 4. Apparatus

NOTE 1—Equivalent apparatus may be used.

4.1 *Stainless Steel Probe*,  $\frac{1}{4}$  in. outside diameter, total length about 40 in.

4.2 *Stainless Steel Tube*,  $\frac{1}{4}$  in. outside diameter, about 20 in. in length.

4.3 *TFE-Fluorocarbon Disk* having  $\frac{1}{8}$  in.  $\times$  6 in. diameter.

4.4 *TFE-Fluorocarbon Stopper*.

4.5 *Vinyl Tubing* and a double-acting rubber bulb (vacuum).

4.6 *Bottle*, amber, 1-gal capacity.

#### 5. Reagents

5.1 Ultra-clean grade trichlorotrifluoroethane.

#### 6. Safety Precautions

6.1 The solvent removes natural oils from skin. Avoid repeated skin contact. The solvent is not flammable and has a threshold limit value of 1000 ppm by volume in air. Sample in the cleanest area available, preferably a white room.

#### 7. Procedure

7.1 *Sampling of 55-gal Drum:*

7.1.1 Set up the apparatus shown in Fig. 1.

7.1.2 Rinse all parts of the apparatus coming in contact with the trichlorotrifluoroethane being sampled with ultra-clean trichlorotrifluoroethane prior to sampling.

7.1.3 Insert the stainless steel probe into the 2 in. bung of the drum.

7.1.4 The sample is drawn by creating a vacuum in the sample bottle with the rubber bulb. A rubber bulb is preferred to an electric vacuum pump as it eliminates a possible source of oil contamination.

7.1.5 As the sample is being drawn, the probe should be raised and lowered in the drum with a slow, swirling action. This will assure a representative sample.

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee D-26 on Halogenated Organic Solvents and is the direct responsibility of Subcommittee D26.04 on Test Methods.

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