

Submitted for recognition as an American National Standard

**Standard of Purity for Recycled HFC-134a (R-134a) for Use
in Mobile Air-Conditioning Systems**

Foreword—The purpose of this SAE Standard is to establish the minimum level of purity required for recycled HFC-134a (R-134a) removed from, and intended for reuse in, mobile air-conditioning (A/C) systems.

1. **Scope**—This SAE Standard applies to HFC-134a (R-134a) refrigerant used to service motor vehicle passenger compartment air-conditioning (A/C) systems designed or retrofitted to use HFC-134a (R-134a). Hermetically sealed, refrigerated cargo systems are not covered by this document.

2. **References**

2.1 **Applicable Publications**—The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J1771—Criteria for Refrigerant Identification Equipment for Use with Mobile Air-Conditioning Systems

SAE J2210—HFC-134a (R-134a) Recycling Equipment for Mobile Air-Conditioning Systems

SAE J2211—Recommended Service Procedure for the Containment of HFC-134a (R-134a)

3. **Purity Specification**—The refrigerant referred to in this document shall have been identified with equipment certified to SAE J1771 as at least 98% pure HFC-134a (R-134a), and has been directly removed from, and intended to be returned to, a mobile A/C system. Contaminants in this recycled refrigerant shall be limited to moisture, refrigerant system lubricant, and noncondensable gases, which, when measured in the refrigerant liquid phase, shall not exceed the following levels:

3.1 **Moisture**—50 ppm by weight

3.2 **Lubricant**—500 ppm by weight

3.3 **Noncondensable Gases (Air)**—150 ppm by weight

4. **Requirements for Recycle Equipment Used in Direct Mobile A/C Service Operations**

4.1 Such equipment shall meet SAE J2210, which covers additional moisture, acid, and filter requirements.

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5. **Purity of HFC-134a Supplied from Other Sources**—The purity of HFC-134a (R-134a) refrigerant, intended for servicing mobile A/C systems, supplied in containers from other sources, shall meet the refrigerant manufacturers specification for new HFC-134a (R-134a), or certified as reclaimed to ARI 700 specification.
6. **Operation of the Recycle Equipment**—Recycle equipment operation shall be in accord with SAE J2211.
7. **Notes**
- 7.1 **Marginal Indicia**—The change bar (I) located in the left margin is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. An (R) symbol to the left of the document title indicates a complete revision of the report.

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