

400 Commonwealth Drive, Warrendale, PA 15096-0001

# SURFACE VEHICLE STANDARD

**SAE** J2099

Issued 1991-12

Submitted for recognition as an American National Standard

# STANDARD OF PURITY FOR RECYCLED HFC-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 removed from, and intended for reuse in, mobile air-conditioning systems.

- 1. Scope—This SAE Standard applies to HFC-134a refrigerant used to service motor vehicle passenger compartment air-conditioning systems designed or retrofitted to use HFC-134a. Hermetically sealed, refrigerated cargo systems are not covered by this document.
- 2. References
- 2.1 Applicable Documents—The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply.
- 2.1.1 SAE Publications—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

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

  SAE J2211—Recommended Service Procedure for the Containment of HFC-134a
- 3. Purity Specification—The refrigerant referred to in this document shall have been directly removed from, and intended to be returned to, a mobile air-conditioning 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 Air-Conditioning Service Operations
- 4.1 Such equipment shall meet J2210, which covers additional moisture, acid, and filter requirements.
- 5. Purity of HFC-134a supplied From Other Sources—The purity of HFC-134a refrigerant supplied in containers from other sources shall, for servicing mobile air-conditioning systems, meet the refrigerant manufacturers specification for new HFC-134a intended for mobile air-conditioning system use.
- 6. Operation of the Recycle Equipment—Recycle equipment operation shall be in accord with SAE J2211.

PREPARED BY THE SAE INTERIOR CLIMATE CONTROL STANDARDS COMMITTEE

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### Rationale - Not applicable

# Relationship of SAE Standard to ISO Standard—Not applicable.

Application — This SAE Standard applies to HFC-134a refrigerant used to service motor vehicle passenger compartment air-conditioning systems designed or retrofitted to use HFC-134a. Hermetically sealed, refrigerated cargo systems are not covered by this document.

#### **Reference Section**

SAE J2210—HFC-134a Recycling Equipment for Mobile Air-Conditioning Systems SAE J2211 - Recommended Service Procedure for the Containment of HFC-134a PDF 01:12099 199112

# **Committee Composition**

## Developed by the SAE Interior Climate Control Standards Committee

- W. J. Atkinson, Sun Test Engineering, Scottsdale, AZ-Chairman
- A. Abraham, Arlington, TX
- G. Ambrozaitis, Mercedes Benz of North America, Montvale, NJ
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- T. E. Banghart, Banghart's Distribution, Upper Darby, PA
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- D. B. Chichester, Aeroquip Corporation, Jackson, MI
- R. K. D'Amico, Nissan R & D, Plymouth, MI
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- H. W. Edson, General Motors Corporation, Madison Heights, MI
- L. D. Elder, Eaton Corporation, Southfield, MI
- K. J. Fouts, Acustar Chrysler Motors, Dayton, OH
- P. C. George, Prince Corporation, Holland, MI
- L. K. Gronlund, BMW of North America Inc., Montvale, NJ
- S. D. Haubert, Aeroquip Corporation, Van Wert, OH
- J. J. Hernandez, Navistar, Fort Wayne, IN
- A. G. Jacobs, Valeo Climate Control Inc., Fort Worth, TX
- S. D. Jones, Caterpillar Inc., Peoria, IL
- J. T. Kosztowny, Mazda R & D of North America, Flat Rock, MI
- D. E. Linn, Volkswagen of America, Warren, MI
- M. G. Malloy, M. G. Malloy & Associates, Schumacher, Ontario, Canada
- K. W. Manz, SPX Corporation, Montpelier, OH
- D. C. Margalus, J I Case Company, Hinsdale, IL
- J. H. McCorkel, Freightliner Corporation, Charlotte, NC