



Test Monitoring Center

6555 Penn Avenue
Pittsburgh, PA 15206-4489
(412) 365-1000

SEQUENCE VIB INFORMATION LETTER 03-3

SEQUENCE NUMBER 16

August 15, 2003

ASTM consensus has not been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Sequence VIB Mailing List

SUBJECT: 1. Fuel Specification
2. Solvent Specification

1. Recently, the Sequence VIB Surveillance Panel confirmed the need to include a specification for the EEE test fuel in Test Method D6837. A fuel specification is contained in Table 1, but is not referred to anywhere in the test method. Section 7.2 has been revised to reference Table 1.
2. The Sequence VIB Surveillance Panel was directed by Subcommittee D0.02.B0.01 to standardize on a solvent meeting ASTM D 235 – Type II, Class C. Sections 7.4.2, A6.2.2.3, A9.1.13, A9.1.14, A9.1.16, A9.1.17, A9.1.18 and X1.33 have been revised to replace Aliphatic Naptha or Stoddard Solvent with degreasing solvent meeting ASTM D 235 – Type II, Class C requirements. In addition, ASTM D 235 has been added as a referenced document. Because of this change to the referenced documents section, an additional footnote was necessary (new footnote 5). Existing footnotes 5 through 11 have been updated and existing footnotes 11 through 18 have been renumbered as 12 through 19. This change is effective January 1, 2004.

Peter Misangyi
Product Engineering
Ford Motor Company

John L. Zalar
Administrator
ASTM Test Monitoring Center

Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/procedure_and_ils/il03-3.pdf

Distribution: Email

2. Referenced Documents

2.1 ASTM Standards:

D 86 Method for Distillation of Petroleum Products⁴

D 235 Standard Specification for Mineral Spirits (Petroleum Spirits) (Hydrocarbon Dry Cleaning Solvent)⁵

D 240 Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter⁴

D 287 Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)⁴

D 323 Test Method for Vapor Pressure of Petroleum Products (Reid Method)⁴

D 381 Test Method for Existent Gum in Fuels by Jet Evaporation⁴

D 445 Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and the calculation of Dynamic Viscosity)⁴

D 525 Test Method for Oxidation Stability of Gasoline (Induction Period Method)⁴

D 1319 Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Absorption⁴

D 2699 Test Method for Knock Characteristics of Motor Fuels by the Research Method⁶

D 3231 Test Method for Phosphorus in Gasoline⁷

D 3237 Test Method for Lead in Gasoline by Atomic Absorption Spectrometry⁷

D 3338 Test Method of Estimation of Net Heat of Combustion of Aviation Fuels⁷

D 4294 Test Method for Sulfur in Petroleum Products by Energy-Dispersive X-ray Fluorescence Spectroscopy⁷

D 4485 Specification for Performance of Engine Oils⁷

D 5302 Test Method for Evaluation of Automotive Engine Oils for Inhibition of Deposit Formation and Wear in a Spark-Ignition Internal Combustion Engine Fueled with Gasoline and Operated Under Low-Temperature, Light-Duty Conditions⁷

D 5533 Test Method for Evaluation of Automotive Engine Oils in the Sequence IIIIE, Spark-Ignition

Engine⁸

D 5844 Test Method for Evaluation of Engine Oils for Inhibition of Rusting (Sequence IID)⁸

D 5862 Test Method for Evaluation of Engine Oils in Two-Stroke Cycle Turbo-Supercharged 6V92TA Diesel Engine⁸

D 6202 Standard Test Method for Automotive Engine Oils on the Fuel Economy of Passenger Cars and Light-Duty Trucks in the Sequence VIA Spark Ignition Engine⁸

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications⁹

E 191 Specification for Apparatus for Microdetermination of Carbon and Hydrogen in Organic and Organo-Metallic Compounds¹⁰

IEEE/ASTM SI 10 Standard for Use of the International System of Units (SI): The Modern Metric System¹¹

⁵ *Annual Book of ASTM Standards, Vol 06.04*

⁶ *Annual Book of ASTM Standards, Vol 05.05*

⁷ *Annual Book of ASTM Standards, Vol 05.02*

⁸ *Annual Book of ASTM Standards, Vol 05.03*

⁹ *Annual Book of ASTM Standards, Vol 14.02*

¹⁰ *Annual Book of ASTM Standards, Vol 14.04*

¹¹ *Annual Book of ASTM Standards, Vol 14.03*

Existing footnotes 11 through 18 renumbered as 12 through 19

7.2 *Test Fuel*—Use only Haltermann (see X1.37) HF 003 fuel.¹⁸ Specification for HF 003 fuel is contained in Table 1. (**Warning**—Danger! Extremely flammable. Vapors harmful if inhaled. Vapors may cause flash fire (see A6.2.2.1).)

7.4.2 *Degreasing Solvent*—Solvent meeting ASTM D 235 – Type II, Class C, see X1.33. (**Warning**—Danger! Extremely flammable. Vapors harmful if inhaled. Vapors may cause flash fire (see A6.2.2.3).)

A6.2.2.3 *Degreasing Solvent*

- (1) Combustible vapor harmful if inhaled.
- (2) Keep away from heat, sparks, open flame.
- (3) Use with adequate ventilation.

- (4) Avoid breathing vapor or spray mist.
- (5) Use water spray, dry chemical, foam, or CO₂ as extinguishing media.
- (6) Avoid prolonged or repeated contact with skin.

A9.1.13 Connect degreasing solvent flush system to the external oil flush system (Step 7).

A9.1.14 Circulate degreasing solvent (minimum 8L) through the external flush system (Step 7) for a minimum of 30 min.

A9.1.16 Disconnect the degreasing solvent flush system and drain the solvent from the external oil flush system.

A9.1.17 Connect and purge air through the external oil flush system (Step 7) for minimum 1h using a minimum 20 psi. Set the 3-way control valve (TCV-144) so that 100% of the flow is through the heat exchanger (HX-6) for most of the hour to ensure the degreasing solvent has been flushed from the bypass section of the heat exchanger (HX-6).

9.1.18 Individually check, and purge with air if necessary, the heat exchanger (HX-6), oil heater, circulating oil pump, and oil filters to ensure all the degreasing solvent has been removed.

X1.33 Degreasing Solvent

Available from local suppliers