



Test Monitoring Center

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T-10 INFORMATION LETTER 04-2
Sequence No. 7

September 17, 2004

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

TO: Mack Mailing List

SUBJECT: T-10 with Ultra-low Sulfur Diesel Fuel

At the September 10, 2004 Mack Surveillance Panel meeting, a motion was approved to add information regarding the European Automobile Manufacturer's Association use of the T-10 test procedure with an alternate fuel. Accordingly, Appendix X1, detailing the fuel specification for a T-10 test on ultra-low sulfur diesel fuel, has been added to Test Method D 6987. This appendix is attached.

A handwritten signature in cursive script that reads "Greg Shank".

Greg Shank
Senior Staff Engineer
Mack Division
Volvo Powertrain

A handwritten signature in cursive script that reads "John L. Zalar".

John L. Zalar
Administrator
ASTM Test Monitoring Center

Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/diesel/mack/procedure_and_ils/T-10/il04-2.pdf

Distribution: Email

(Revises D 6987-03 as amended by Information Letter 04-1)

APPENDIXES

(Nonmandatory Information)

X1. T-10 with Ultra-Low Sulfur Diesel Fuel (ULSD)

X1.1 The European Automobile Manufacturers Association (ACEA) uses results from T-10 tests run on ultra-low sulfur diesel fuel, designated by ACEA as the T-10 ULSD. Ranges for such a fuel are provided in Table X1.1. This test method makes no attempt to quantify precision or discrimination between results for T-10 tests run with this or any other alternate fuel.

Table X1.1 ULSD Fuel Specification

Property	Specification	Test Method
Additives	Lubricity additive only	
Distillation Range, °C		
90%	293 – 332	ASTM D 86
Specific Gravity	0.840 – 0.855	ASTM D 4052
API Gravity	34 – 37	ASTM D 4052
Corrosion, 3 h at 50 °C	1 max	ASTM D 130
Sulfur, mass ppm	7 – 15	ASTM D 5453
Flash Point, °C	54 min	ASTM D 93
Pour Point, °C	-18 max	ASTM D 97
Cloud Point, °C	Report	ASTM D 2500
Viscosity at 40 °C, cSt	2.0 – 2.6	ASTM D 445
Ash, weight %	0.005 max	ASTM D 482
Carbon Residue on 10% Bottoms	0.35 max	ASTM D 524
Net Heat of Combustion	Report	ASTM D 3338
Water and Sediment, volume %	0.05 max	ASTM D 2709
Total Acid Number	0.05 max	ASTM D 664
Strong Acid Number	0 max	ASTM D 664
Cetane Index	Report	ASTM D 976
Cetane Number	43 – 47	ASTM D 613
Accelerated Stability, mg/100 mL	1.5 max	ASTM D 2274
Composition		
Aromatics, wt %	26 – 31.5	ASTM D 5186
Olefins, vol %	Report	ASTM D 1319
Saturates, vol %	Report	ASTM D 1319
SLBOCLE, g	3100 min ⁴	ASTM D 6078 ⁴

⁴ May be altered to be consistent with CARB or ASTM diesel fuel specifications.