NOT MEASUREMENT SENSITIVE

A-A-52557A
January 16, 2001
SUPERSEDING
A-A-52557
January 2, 1996

COMMERCIAL ITEM DESCRIPTION

FUEL OIL, DIESEL; FOR POSTS, CAMPS AND STATIONS

The General Services Administration has authorized the use of this commercial item description (CID), for all federal agencies.

1. SCOPE. This CID covers requirements for two grades of low sulfur diesel fuel oils suitable for use in ground compression-ignition and gas turbine engines and other diesel fuel consuming equipment. The two grades of fuel are not suitable for aircraft engines. This diesel fuel is identified as NATO Code Number F-54 (see 7.6). This CID does not cover diesel fuels intended for use in areas where ambient temperatures lower than –32°C generally occur (see 7.8).

2. CLASSIFICATIONS. The diesel fuel oil shall be of two grade designations as follows:

2.1 Grade.

2.1.1 Grade Low Sulfur No. 1-D. A special-purpose, light distillate fuel used for automotive diesel and gas turbine engines requiring low sulfur fuel and requiring a higher volatility than that provided by Grade Low Sulfur No. 2-D.

2.1.2 Grade Low Sulfur No. 2-D. A general purpose, middle distillate fuel used for automotive diesel and gas turbine engines requiring low sulfur fuel. It is also suitable for use in non-automotive application, especially in conditions of variable speed and load.

3. SALIENT CHARACTERISTICS.

3.1 Material. The grades of diesel fuel oils herein specified shall be hydrocarbon oils conforming to the detailed requirements of ASTM D975 except as noted below.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-D/210, Warren, MI 48397-5000.

AMSC N/A FSC 9140

3.2 Fuel stabilizer additive. When specified (see 7.3), a fuel stabilizer additive/biocide conforming to MIL-S-53021 shall be blended into the fuel to improve the suitability of fuels for long term storage (more than six months) and for use in pre-positioned or standby equipment by preventing fuel deterioration and microbiological growth (see 7.4). Additive concentrations are given in the latest revision of QPL-53021.

3.3 Corrosion inhibitor/lubricity improver. When specified (see 7.3), a corrosion inhibitor/lubricity improver conforming to MIL-PRF-25017 shall be blended into the fuel. Additive concentration limits are given in the latest revision of QPL-25017.

3.4 Fuel system icing inhibitor. When specified (see 7.3), a fuel system icing inhibitor conforming to MIL-DTL-85470 shall be blended into the fuel to purge small quantities of water from the fuel system and to prevent the formation of ice crystals. The additive concentration shall not exceed 0.15 volume percent when tested in accordance with (IAW) FED-STD-791, methods 5327, 5330, 5340, or 5342.

3.5 Performance requirements.

3.5.1 Physical and chemical requirements. The maximum cloud point (see 7.3) shall be equal to or lower than the tenth percentile minimum ambient temperature for the area in which ambient temperatures for U.S. locations are shown in Appendix X4 of ASTM D975 (10th Percentile Minimum Ambient Air Temperatures for the United States (Except Hawaii)).

3.5.2 Particulates. Total particulate level as measured IAW ASTM D6217 shall not exceed 10 milligrams/liter (mg/L).

4. REGULATORY REQUIREMENTS.

4.1 Clean Air Act requirements. Under authority of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) issues limits on the maximum sulfur level, the maximum aromatic content or minimum cetane index on diesel intended for on-road use. Details of the EPA regulations and test methods are given in Part 80 of Title 40 of the Code of Federal Regulations (40 CFR 80). Some states, notably California, have more restrictive aromatic content limits. Specifics may be obtained by contacting the Air Quality Office of the state environmental office or headquarters.

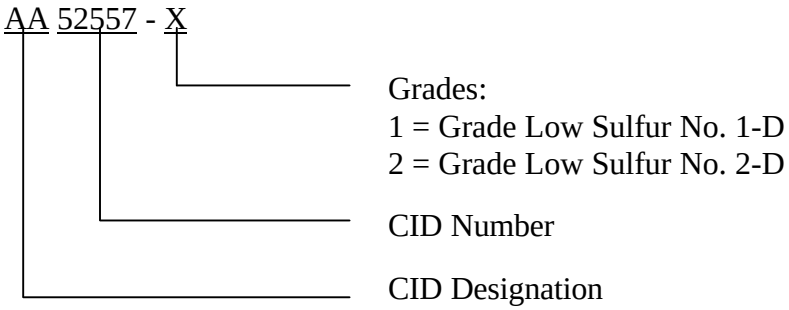
4.2 Dye. The Internal Revenue Service (IRS) requires that a red dye, identified as Solvent Red 164 (alkyl derivatives of azo benzene azo naphthol), must be added to all non-taxable diesel fuel as a means of identification. The minimum concentration is provided in 40 CFR 80.

5. PRODUCT CONFORMANCE. The diesel fuel oil provided shall meet the salient characteristics of this CID, conform to the producer's own specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

6. PACKAGING. Preservation, packing, and marking shall be as specified in the contract order (see 7.3).

7. NOTES.

7.1 Part or Identification Number (PIN). The following PIN procedure is for Government purposes and does not constitute a requirement for the contractor. The PINs to be used for diesel fuel oil acquired to this CID are created as follows:



7.2 Source of documents.

7.2.1 The Code of Federal Regulations (CFR) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

7.2.2 Copies of FED-STD-791, MIL-PRF-25017, MIL-S-53021, MIL-DTL-85470, QPL-25017, and QPL-53021, are available from the Document Automation and Production Service, (Customer Service), Bldg. 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

7.2.3 Copies of ASTM D975 and ASTM D6217 are available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

7.3 Ordering data. The contract or order should specify the following:

a. CID document number, revision, and CID PIN.
b. Product conformance provisions.
c. Cloud point required (see 3.5.1).
d. Quantity of diesel fuel oil in terms of gallons or barrels bulk or number and size of containers for packaged lots.
e. Selection of applicable level and packaging requirements.
f. If fuel stabilizer, corrosion inhibitor/lubricity improver, icing inhibitor, or any combination thereof is required (see 3.2, 3.3 and 3.4).

7.4 Fuel degradation. Fuel stored under warm or tropical conditions is especially susceptible to deterioration and microbiological growth. The additive is not intended for routine use, but only when the conditions favorable to fuel degradation are expected to be encountered.

7.5 Material Safety Data Sheets (MSDS). Contracting officers will identify those activities requiring copies of MSDS's prepared IAW FED-STD-313. The pertinent Government mailing addresses for submission of data are listed in FED-STD-313; and 29 CFR 1910.1200 requires that the MSDS for each hazardous chemical used in an operation must be readily available to personnel using the material. Contracting officers will identify the activities requiring copies of the MSDS.

7.6 International standardization agreement. Certain provisions of this CID are the subject of international standardization agreement NATO STANAG 1135. When revision or cancellation of this CID is proposed which will modify the international agreement concerned, the preparing activity will take appropriate action through international standardization channels, including departmental standardization offices, to change the agreement or make other appropriate accommodations.

7.7 Key words.

Automotive
Distillate
Gas
NATO STANAG 1135
Sulfur
Turbine

7.8 Diesel fuel for arctic use. Users in Alaska and other cold temperature environments should use grade JP-8 fuel IAW MIL-DTL-83133 since this CID has replaced the obsolete specification VV-F-800 which included the Grade Diesel Fuel Arctic (DF-A).

MILITARY INTERESTS:
ACTIVITIES:

Custodians:
Army – AT
Navy – SH
Air Force – 68

Review Activities:
Army – AR, MI
Navy – EC, MC, SA
Air Force – 03, 11
DLA – PS

CIVIL AGENCY COORDINATION

GSA/FSS - 6FET
HHS – NIH
DOT – NHT

Preparing Activity:
Army - AT

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