C16.01 TURBINE FUEL, AVIATION (JP5) (DLA ENERGY APRIL 2018)

NATIONAL STOCK NUMBER	PRODUCT NOMENCLATURE	DLA ENERGY PRODUCT
9130-00-273-2379	Turbine Fuel, Aviation, JP-5	JP5
9130-01-499-9521	Turbine Fuel, Aviation, JP-5 (Bunker fuel overseas locations only)	JP5

Product shall meet MIL-DTL-5624W, Turbine Fuel, Aviation, Grade JP-5, dated March 28, 2016.

(a) **SPECIFICATION MODIFICATION:** The requirements of Table I in the specification are modified as follows:

a. **FILTRATION TIME TESTING.** Round upwards when reporting the filtration time, in minutes. For example, a filtration time of 4 minutes, 22 seconds, would be reported as 5 minutes.

b. **FLASH POINT TESTING.** The referee procedure for performing flash point testing of JP-5 shall be the manual method of ASTM D93 as opposed to the automated version of ASTM D93.

c. **FLASH POINT.**

i. All batches of JP-5 that are presented for Government acceptance at origin and for subsequent shipment through a multiproduct pipeline, shall meet a minimum flash point requirement of 62.5°C.

ii. In the U.S. all JP-5 deliveries in California, Oregon, and Washington shall have a minimum Flash Point of 62.5 ^{o}C at the custody transfer point.

iii. In Australia all JP-5 deliveries shall have a minimum Flash Point of 61.5°C at the custody transfer point.

d. **ACID NUMBER.** For JP-5 delivered to Kodiak Island, Alaska, the maximum total acid number shall be 0.020 mg KOH/g.

e. **MICRO-SEPAROMETER (MSEP) REQUIREMENTS.**

i. Prior to initial production under this contract, the Contractor shall elect, on a one-time basis, which MSEP limit to meet for the balance of the contract. If the Contractor introduces Fuel System Icing Inhibitor (FSII) and/or Corrosion Inhibitor/Lubricity Improver (CI/LI) after verification of product conformance with the MSEP requirement, the product is not required to meet a fixed limit on subsequent MSEP tests.

ii. If the Contractor elects to verify conformance with the MSEP requirement on a sample of product that does not contain FSII and CI/LI, an additional MSEP test shall be performed on a hand blend containing jet fuel, FSII, CI/LI, and Antioxidant (only if required). The FSII shall be added to this hand blend at a concentration range between 0.08 volume percent minimum and 0.11 volume percent maximum. The amount of the CI/LI added to this hand blend shall be within the concentration range specified in QPL-25017.

f. **ADDITIONAL REQUIREMENT APPLICABLE TO DEEP FREEZE PROGRAM ONLY**. The Deep Freeze Program is for Antarctic operations of the Department of Defense and other federal agencies; whereby JP-5 sulfur content shall not exceed 0.0015 mass-percent (15 ppm).

(b) **ADDITIVES.**

a. Additives are required for deliveries of JP-5, per MIL-DTL-5624W, unless addition is excluded by specific solicitation line item, applicable contract clause, or other contractual requirement. FSII included in jet fuel shall conform to MIL-DTL-85470B, Inhibitor, Icing, Fuel System, High Flash, Notice 1 dated June 15, 1999 and revalidated March 24, 2004.

b. The CI/LI additive(s) used shall conform to MIL-PRF-25017H Inhibitor, Corrosion/Lubricity Improver, Fuel Soluble, w/Amendment 1, dated August 4, 2011

c. Line injection of additives (FSII and CI/LI) from shipping tank to delivery conveyance or other free on board (FOB) point is permitted under the following conditions:

i. Additives must be proportionately injected throughout the entire loading process to ensure the additive is homogeneously blended into the jet fuel. The Contractor shall maintain records evidencing the homogeneous blending of all line injected additives. Such methods may include meter or tank gauge readings or test results taken at intervals to provide confidence in the injection process.

ii. When FSII is required, additive concentration must be verified based on a representative sample from each shipping conveyance.

(c) Conformance to specification requirements at the custody transfer point is required, however, prior to shipment, a laboratory hand blend of JP-5 fuel with all additives required by this contract shall be tested to verify compliance with the required specification (except for MSEP). MSEP analysis shall be performed per the Contractor's election in MIL-DTL-5624W.

(d) **BATCH SAMPLING**: The Contractor shall provide one 20 mL sample per each individual tank in a procurement batch.

NOTE: This sample is in addition to those required in accordance with Quality Assurance Provision (QAP) E1

QUANTITY OF SAMPLE	WHEN SAMPLED	SUBMISSION PERIOD
20 mL	Upon completion of each individual procurement batch	Shipped within 30 days of procurement batch delivery
"Batch" Definition in accordance with MIL-STD-3004, 3.1.9: A specific quantity of product that is processed or utilized as a single unit and tested to meet test criteria and specifications.		

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The sample from each tank/batch shall be either an all-level sample or a composite of upper, middle, and lower samples. A copy of the batch's full-specification test report shall accompany each sample. The sample container shall be any 20 mL amber borosilicate vial with a polytetrafluoroethylene (PTFE) lined screw cap. A tracking number for the samples shall be provided to: Thomas Loegel at thomas.loegel@nrl.navy.mil or (202) 767-1716. Samples shall be shipped to:

US Naval Research Laboratory
ATTN: Thomas Loegel, Code 6181
JP-5 Component Analysis Library Project
4555 Overlook Ave., S.W.
Washington D.C. 20375-5320

The paperwork provided with these samples shall include the following information:

- Contract Number
- Contractor's Name
- Product
- Refinery Location
- Quantity of Tank/Batch
- For samples containing synthetic components, include the following additional information:
- Manufacturer of synthetic component
- Batch Number
- Date of Test Report
- Quantity of Tank/Batch
- Percent Composition
- Production Process of Synthetic Component
- Feedstock

	Signature
Prepared by	YEN.CHENG.H.1539446041 Digitally signed by YEN.CHENG.H.1539446041 Date: 2018.04.25 09:13:12 -04'00'
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