

# USDA BioPreferred<sup>SM</sup> Process for Industry Investigation

## Designation Item

This section details the item that has been investigated for designation in the BioPreferred<sup>SM</sup> program.

**Item Investigated:** 2 Cycle Engine Oil

## Industry Investigation Addendum

The original Industry Investigation documents included results from the Defense Logistics Agency (DLA) ASSIST Quick Search. This document provides product information, test methods, and performance standards results from the Defense Logistics Agency Basic Search related to biobased products. This information reflects the DLA Basic Search results as of March 19, 2007.

### Defense Logistics Agency – ASSIST Database – Basic Search ([http://www.assistdocs.com/search/search\\_basic.cfm](http://www.assistdocs.com/search/search_basic.cfm))

This search lists military, federal, and commercial item specifications.

Keyword	Results	
2 Cycle Engine Oil	QPL-24435-2	LUBRICATING OIL, MARINE TWO STROKE CYCLE GASOLINE ENGINE (NO S/S DOCUMENT)
	MIL-PRF-2104H	LUBRICATING OIL, INTERNAL COMBUSTION ENGINE, COMBAT/TACTICAL SERVICE
	MIL-PRF-21260E	LUBRICATING OIL, INTERNAL COMBUSTION ENGINE, PRESERVATIVE BREAK-IN
	MIL-S-38399A(2)	STARTER, PNEUMATIC, AIRCRAFT ENGINE GENERAL SPECIFICATION FOR
	MIL-S-85419	STARTER AUXILIARY POWER UNIT, AIRCRAFT ENGINE, GAS TURBINE TYPE, DETAILED SPECIFICATION FOR
	MIL-DTL-62177E	ENGINE, DIESEL: 12-CYLINDER, 90 DEG. V-TYPE, 750 H.P. AVDS1790-2, AVDS1790-2A, AVDS1790-2C, AVDS1790-2D, AVDS1790-2DR, AVDS1790-2CA, AND AVDS1790-2DA
	MIL-DTL-62462D	ENGINE, DIESEL, LIQUID-COOLED, 8 CYLINDER; 4 CYCLE, V-TYPE, 220 KW (295 HP)
	A-A-50221	TOOL, FORCED ENTRY AND RESCUE, 20,000 POUNDS (NO S/S DOCUMENT)
	MIL-S-27266A(1)	STARTER, ENGINE, CARTRIDGE/PNEUMATIC SHAFT

	DRIVE, GENERAL SPECIFICATION FOR
MIL-PRF-3043C	RESIN COATING, PERMANENT, FOR ENGINE COMPONENTS AND METAL PARTS
MIL-DTL-62548B	LEAD, IGNITION
MIL-W-80037C(1)	WELDING MACHINES, ARC, DC, GENERATOR, CONSTANT CURRENT, INTERNAL COMBUSTION ENGINE DRIVEN (S/S BY A-A-59397)
MIL-M-63014A	MANUALS, TECHNICAL: FOR PHASED MAINTENANCE CHECKLIST (S/S BY MIL-STD-40051)
MIL-PRF-2104H	LUBRICATING OIL, INTERNAL COMBUSTION ENGINE, COMBAT/TACTICAL SERVICE
MIL-L-22851D(1)	LUBRICATING OIL, AIRCRAFT PISTON ENGINE (ASHLESS DISPERSANT) (S/S BY SAE-J1899)
A-A-59722	MOBILE POWER UTILITY, TRAILER
A-A-50681	TRAILER, MAINTENANCE POWER
MIL-T-40632B	TRUCK, FORKLIFT, DIESEL ENGINE DRIVEN, 120 INCH (3050 MM) LIFT HEIGHT, DS SAFETY RATED, PNEUMATIC RUBBER TIRES, ROUGH TERRAIN, FOR SHIPBOARD USE
MIL-C-7488A(3)	COOLER, OIL, PLATE, AIRCRAFT (S/S BY MIL-PRF-25478)
MIL-STD-1410A	METHODS FOR SELECTION OF INDUSTRIAL ENGINES FOR END ITEM APPLICATION (NO S/S DOCUMENT)
MIL-W-80110C	STUD WELDING UNITS, INDEPENDENT DC POWER SOURCE WITH SEPARATE CONTROL UNIT, ELECTRIC ARC (NO S/S DOCUMENT)
MIL-E-52649B	ENGINE COLD STARTING AIDS, ETHER FUEL PRIMERS
MIL-T-2452J	TRUCKS, REFUSE COLLECTION: COMPACTION TYPE, REAR HOPPER LOADING, WITH TILT CAB, DIESEL AND GASOLINE ENGINE DRIVEN, 19,000 TO 44,500 POUNDS GVW, 4X2 AND 6X4, 10 TO 25 YARD, COMMERCIAL

	MIL-T-62497	TRUCK, REFUSE COLLECTION: COMPACTION TYPE, ONE-PERSON OPERATION, AUTOMATED SIDE-LOADING, 20 YARD, DUAL RIGHT AND LEFT HAND DRIVE, DIESEL ENGINE DRIVEN, 32,000 POUNDS GVW, 4X2, WITH TILT CAB, COMMERCIAL
Engine Lubricants	STANAG-7017 ED.1(4)	SPECTROMETRIC ANALYSIS OF AIRCRAFT ENGINE LUBRICANTS
	ASTM-D4863	ENGINE LUBRICANTS, GASOLINE, LUBRICITY OF TWO-STROKE-CYCLE, DETERMINATION OF
	QPL-46167-15	LUBRICATING OIL, INTERNAL COMBUSTION ENGINE, ARCTIC
	MIL-DTL-22202D	AIRCRAFT CROSS-SERVICING MANUALS, TECHNICAL, PREPARATION OF
	QPL-J1966-2	LUBRICATING OILS, AIRCRAFT PISTON ENGINE (NON-DISPERSANT MINERAL OIL)
	QPL-J1899-2	LUBRICATING OIL, AIRCRAFT PISTON ENGINE, (ASHLESS DISPERSANT)
	QPL-9000-102	LUBRICATING OIL, SHIPBOARD INTERNAL COMBUSTION ENGINE, HIGH OUTPUT DIESEL
	QPL-2104-46	LUBRICATING OIL, INTERNAL COMBUSTION ENGINE, COMBAT/TACTICAL SERVICE
	A-A-52017A	COMPRESSOR UNIT: DIESEL-ENGINE-DRIVEN, 450-650 CFM, 350 PSI, WHEEL-MOUNTED
	DOD-PRF-85734A	LUBRICATING OIL, HELICOPTER TRANSMISSION SYSTEM, SYNTHETIC BASE
	ASTM-STP509	ENGINE, SINGLE CYLINDER, TEST FOR EVALUATING THE PERFORMANCE OF CRANKCASE LUBRICANTS
	MIL-T-52908(2)	TRACTOR, WHEELED, WITH BACKHOE, LOADER, HYDRAULIC IMPACT TOOL AND HYDRAULIC EARTH AUGER ATTACHMENT, COMMERCIAL CONSTRUCTION EQUIPMENT (CCE) (S/S BY MIL-T-53033)
	MIL-T-52843C(1)	TRUCKS, LIFT, FORK, DIESEL-ENGINE-DRIVEN: PNEUMATIC TIRED, ROUGH TERRAIN; 10,000 POUND CAPACITY AT 48-INCH

		LOAD CENTER
	ASTM-D4636	OILS, HYDRAULIC, AIRCRAFT TURBINE ENGINE LUBRICANTS, AND OTHER HIGHLY REFINED OILS, CORROSIVENESS AND OXIDATION STABILITY OF
	QPL-6529-24	CORROSION-PREVENTATIVE, AIRCRAFT ENGINE
	QPL-6081-30	LUBRICATING OIL, JET ENGINE
	MIL-PRF-6085D	LUBRICATING OIL: INSTRUMENT, AIRCRAFT, LOW VOLATILITY
	MIL-PRF-8188D	CORROSION-PREVENTIVE, AIRCRAFT TURBINE ENGINE, SYNTHETIC BASE
	MIL-HDBK-275A	GUIDE FOR SELECTION OF LUBRICANTS, FLUIDS, AND COMPOUNDS FOR USE IN FLIGHT VEHICLES AND COMPONENTS
	MIL-C-52037F	COMPRESSOR UNIT, RECIPROCATING, POWER-DRIVEN, AIR, 15 CFM, 3,500-PSI
	MIL-PRF-7808L	LUBRICATING OIL, AIRCRAFT TURBINE ENGINE, SYNTHETIC BASE
	QPL-23699-19	LUBRICATING OIL, AIRCRAFT TURBINE ENGINES, SYNTHETIC BASE NATO CODE NUMBER O-156, O-154 AND O-152
	MIL-L-46811B	LUBRICATION OF GROUND HANDLING, LAUNCHING AND CONTROL EQUIPMENT FOR GUIDED MISSILES
	MIL-P-28589	PUMP, CENTRIFUGAL, PORTABLE, SELF-PRIMING, GASOLINE-ENGINE-DRIVEN (NONCLOGGING, TRASH HANDLING, CONTRACTOR TYPE) (S/S BY MIL-P-17861)
	MIL-S-3050C	SPRAY OUTFIT, PAINT, BITUMINOUS EMULSION, TRAILOR MOUNTED, WITH COMPRESSOR & GASOLINE ENGINE (NO S/S DOCUMENT)
	A-A-52164A	MOTORCYCLE: DUAL PURPOSE, FOUR STROKE, NOMINAL 250 CC, MODIFIED COMMERCIAL
Small Engine Lubricants	MIL-B-734E(1)	BREAKER, PAVING, GASOLINE POWERED, SELF CONTAINED
	MIL-B-83175(1)	BEARING, BALL, ANNULAR, ANTIFRICTION, ACCESSORY,

	HIGH SPEED TURBINE, AIRCRAFT (NO S/S DOCUMENT)
A-A-52164A	MOTORCYCLE: DUAL PURPOSE, FOUR STROKE, NOMINAL 250 CC, MODIFIED COMMERCIAL
MIL-L-8937D	LUBRICANT, SOLID FILM, HEAT CURED, CORROSION INHIBITING, NATO CODE NUMBER S-1738 (S/S BY MIL-L-46010)
MIL-HDBK-201B(1)	PETROLEUM OPERATIONS
MIL-PRF-46147C	LUBRICANT, SOLID FILM, AIR CURED (CORROSION INHIBITING)
MIL-STD-1792	FASTENING SYSTEMS, MECHANICAL, AIR VEHICLE
MIL-O-11585F	OUTBOARD MOTOR, GASOLINE, WITH CARRYING CHEST (NO S/S DOCUMENT)
MIL-PRF-46010F	LUBRICANT, SOLID FILM, HEAT CURED, CORROSION INHIBITING
A-A-59180A	LATHE, BENCH AND JEWELER'S, HORIZONTAL SPINDLE
MIL-PRF-32014A	GREASE, AIRCRAFT AND INSTRUMENT
MIL-C-83980(1)	COMPRESSOR, AIR, POWER DRIVEN, PORTABLE 5 CFM, 175 PSI (NO S/S DOCUMENT)
MIL-C-62467	CARRIER, CARGO, 1 1/2 TON, M973, SMALL UNIT SUPPORT VEHICLE (SUSV) (NO S/S DOCUMENT)
MIL-HDBK-114A	FUELS, MOBILITY, USER HANDBOOK
MIL-J-14158E(1)	JACK, RAILWAY TRACK, GASOLINE- OR DIESEL-ENGINE-DRIVEN, RAILROAD, WHEEL-MOUNTED (NO S/S DOCUMENT)
MIL-B-29159A	BOAT SYSTEM, UTILITY, NOMINAL, 20-FOOT REINFORCED PLASTIC WITH 100-HORSEPOWER OUTBOARD ENGINE AND TRAILER (NO S/S DOCUMENT)
MIL-STD-1599	BEARINGS, CONTROL SYSTEM COMPONENTS, AND ASSOCIATED HARDWARE USED IN THE DESIGN AND CONSTRUCTION OF AEROSPACE MECHANICAL SYSTEMS AND SUBSYSTEMS (S/S BY MIL-HDBK-1599)

MIL-HDBK-275A	GUIDE FOR SELECTION OF LUBRICANTS, FLUIDS, AND COMPOUNDS FOR USE IN FLIGHT VEHICLES AND COMPONENTS
MIL-I-8574E(2)	INHIBITORS, CORROSION, VOLATILE, UTILIZATION OF
MIL-STD-3004A(1)	QUALITY SURVEILLANCE FOR FUELS, LUBRICANTS, AND RELATED PRODUCTS
MIL-STD-1262(1)	DEGRADATION TESTS FOR FUELS AND FUEL CONTAINER COATINGS (TEST PROCEDURE) (NO S/S DOCUMENT)
MIL-T-5955C	TRANSMISSION SYSTEM, VTOL - STOL, GENERAL REQUIREMENTS FOR (NO S/S DOCUMENT)
MIL-C-4976C	CABINET, DRYING, PARACHUTE, TYPE MA-1
MIL-HDBK-134A	TRUCK AND TRUCK TRACTORS, TACTICAL (MILITARY) DESIGN, CHARACTERISTICS OF (NO S/S DOCUMENT)
MIL-T-62088B	TRUCKS, ARMORED: PAYROLL DISTRIBUTION, 8600 KILOGRAMS (19,000 POUNDS) GVW, 4X2, MODIFIED COMMERCIAL (NO S/S DOCUMENT)
MIL-S-18141J	SWEEPER, ROTARY, TOWED (S/S BY A-A-55544)
MIL-M-23421D	MOWERS, LAWN; FLAIL TYPE, TOWED AND TRACTOR MOUNTING (NO S/S DOCUMENT)
MIL-STD-1518D	STORAGE, HANDLING, AND SERVICING OF AVIATION FUELS, LUBRICATING OILS, AND HYDRAULIC FLUIDS AT CONTRACTOR FACILITIES
MIL-B-10122E	BARGE, LIQUID CARGO: NONPROPELLED, STEEL, OFFSHORE, 4,160-BARREL, 120-FOOT, DESIGN 231C