

USDA BioPreferredSM Process for Industry Investigation

Designation Item

This section details the item that has been investigated for designation in the BioPreferredSM program.

Item Investigated: Stationary Hydraulic Fluids

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 20, 2007.

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

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

Keyword	Results	
Hydraulic Fluid	MIL-PRF-6083F	HYDRAULIC FLUID, PETROLEUM BASE, FOR PRESERVATION AND OPERATION
	MIL-DTL-8794E	HOSE, ELASTOMERIC - HYDRAULIC FLUID, FUEL, AND OIL RESISTANT
	MIL-DTL-8795E	HOSE ASSEMBLIES, ELASTOMERIC - HYDRAULIC FLUID, FUEL, AND OIL RESISTANT, GENERAL SPECIFICATION FOR
	MIL-PRF-17672D(3)	HYDRAULIC FLUID, PETROLEUM, INHIBITED
	MIL-H-19457D	HYDRAULIC FLUID, FIRE-RESISTANT, NON-NEUROTOXIC
	MIL-H-22072C	HYDRAULIC FLUID, CATAPULT, NATO CODE NUMBER H-579
	MIL-H-24135/6A	HOSE, SYNTHETIC RUBBER, WIRE REINFORCED, FOR FLEXIBLE HOSE ASSEMBLIES (DOUBLE WIRE BRAID OR TWO-SPIRAL AND ONE-WIRE BRAID, HIGH PRESSURE, SIZES -4 THROUGH -32 FOR PHOSPHATE ESTER BASE HYDRAULIC FLUIDS)
	MIL-V-24630(3)	VALVES, CHECK, IN-LINE, FOR HYDRAULIC FLUID AND LUBRICATING OIL FLUID

MIL-V-24630/1A	VALVES, CHECK, IN-LINE, NON-REVERSIBLE INSTALLATION FOR HYDRAULIC FLUID AND LUBRICATING OIL FLUID
MIL-PRF-27601C	HYDRAULIC FLUID, FIRE RESISTANT, HYDROGENATED POLYALPHAOLEFIN BASE, HIGH TEMPERATURE, FLIGHT VEHICLE, METRIC
MIL-PRF-32073	HYDRAULIC FLUID, BIODEGRADABLE
MIL-PRF-46170D	HYDRAULIC FLUID, RUST INHIBITED, FIRE RESISTANT, SYNTHETIC HYDROCARBON BASE, NATO CODE NO. H-544
MIL-H-81019D	HYDRAULIC FLUID, PETROLEUM BASE, ULTRA-LOW TEMPERATURE, METRIC
MIL-PRF-83282D	HYDRAULIC FLUID, FIRE RESISTANT, SYNTHETIC HYDROCARBON BASE, METRIC, NATO CODE NUMBER H-537
MIL-DTL-85052/1C	CLAMP, LOOP, TUBE 17-7 PH CRES, 275 DEG. F, FUEL AND PETROLEUM BASED HYDRAULIC FLUID RESISTANT
MIL-PRF-87257B	HYDRAULIC FLUID, FIRE RESISTANT; LOW TEMPERATURE, SYNTHETIC HYDROCARBON BASE, AIRCRAFT AND MISSILE
MIL-STD-1518D	STORAGE, HANDLING, AND SERVICING OF AVIATION FUELS, LUBRICATING OILS, AND HYDRAULIC FLUIDS AT CONTRACTOR FACILITIES
A-A-59290	HYDRAULIC FLUID, ARRESTING GEAR
A-A-59354	HYDRAULIC FLUIDS, PETROLEUM BASE, FOR MACHINE TOOLS
A-A-59404	DISPENSER UNIT, HYDRAULIC FLUID, PORTABLE
QPL-5606-31	HYDRAULIC FLUID, PETROLEUM BASE, AIRCRAFT; MISSILE AND ORDNANCE
QPL-6083-23	HYDRAULIC FLUID, PETROLEUM BASE, FOR PRESERVATION AND OPERATION
QPL-8794-26	HOSE, ELASTOMERIC - HYDRAULIC FLUID, FUEL, AND OIL RESISTANT

	QPL-17672-69	HYDRAULIC FLUID, PETROLEUM, INHIBITED
	QPL-22072-12	HYDRAULIC FLUID, CATAPULT NATO CODE NUMBER H-579
	QPL-24630-6	VALVES, CHECK, IN-LINE, FOR HYDRAULIC FLUID AND LUBRICATING OIL FLUID
	QPL-25732-18(3)	PACKING, PREFORMED, PETROLEUM HYDRAULIC FLUID RESISTANT, LIMITED SERVICE AT 275 DEG. F (135 DEG. C)
	QPL-27601-4	HYDRAULIC FLUID, PETROLEUM BASE, HIGH TEMPERATURE, FLIGHT VEHICLE
	QPL-32073-4	HYDRAULIC FLUID, BIODEGRADABLE
Fluid Power	ANSI-Y32.10	DIAGRAMS, FLUID POWER, GRAPHIC SYMBOLS FOR
	ASME-Y14.40.10	DIAGRAMS, GRAPHICAL SYMBOLS FOR - PART 10: FLUID POWER CONVERTERS
	ISO5598	FLUID POWER SYSTEMS AND COMPONENTS - VOCABULARY
	ISO10763	FLUID POWER, HYDRAULIC - PLAIN-END, SEAMLESS AND WELDED PRECISION STEEL TUBES - DIMENSIONS AND NOMINAL WORKING PRESSURES
	NFPA-B93.30M	FLUID POWER, HYDRAULIC-CONTAMINATION ANALYSIS DATA-REPORTING METHOD
	NFPA-T2.6.1	METHOD FOR VERIFYING THE FATIGUE AND ESTABLISHING THE BURST PRESSURE RATINGS OF THE PRESSURE CONTAINING ENVELOPE OF A METAL FLUID POWER COMPONENT
	NFPA-T2.7.2	HYDRAULIC FLUID POWER - PUMPS - DETERMINATION OF FLUID PRESSURE FLUCTUATION CHARACTERISTICS
	NFPA-T2.12.1	FLUID POWER, HYDRAULIC - SYSTEMS AND PRODUCTS - METHOD OF MEASURING AVERAGE STEADY - STATE PRESSURE
	NFPA-T2.12.10	HYDRAULIC FLUID POWER - SYSTEMS AND PRODUCTS - TESTING GENERAL MEASUREMENT, PRINCIPLES AND TECHNIQUES -

		RECOMMENDED PRACTICE
	NFPA-T2.13.2	FLUID POWER-FIRE RESISTANT FLUIDS-INFORMATION REPORT ON COMPANY TRADE NAMES, HYDRAULIC
	NFPA-T2.24.1	HYDRAULIC FLUID POWER-SYSTEMS STANDARD FOR STATIONARY INDUSTRIAL MACHINERY
	NFPA-T2.30.4	FLUID POWER SYSTEMS-APPLICATION GUIDELINES FOR SELECTION OF FLUID POWER POSITION TRANSDUCERS, RECOMMENDED PRACTICE
	NFPA-T3.5.45	HYDRAULIC FLUID POWER - TWO-PORT SLIP-IN CARTRIDGE VALVES - CAVITIES
	NFPA-T3.9.18	METHOD OF ESTABLISHING THE FLOW DEGRADATION OF FIXED DISPLACEMENT HYDRAULIC FLUID POWER PUMPS WHEN EXPOSED TO PARTICULATE CONTAMINANT
	NFPA-T3.12.17	PNEUMATIC FLUID POWER-FILTERS, REGULATORS AND LUBRICATORS-APPLICATION GUIDELINES
	NFPA-T3.19.25	FLUID POWER SYSTEMS-SEALING DEVICES-STORAGE, HANDLING, AND INSTALLATION OF ELASTOMER SEALS AND EXCLUSION DEVICES, INFORMATION REPORT
	SAE-ARP598	AEROSPACE MICROSCOPIC SIZING AND COUNTING OF PARTICULATE CONTAMINATION FOR FLUID POWER SYSTEMS
	SAE-ARP994	TUBING INSTALLATIONS FOR AEROSPACE FLUID POWER SYSTEMS, THE DESIGN OF, RECOMMENDED PRACTICE FOR
	SAE-J1926/2	CONNECTIONS FOR GENERAL USE AND FLUID POWER - PORTS AND STUD ENDS WITH ISO725 THREADS AND O-RING SEALING - PART 2: HEAVY-DUTY (S SERIES) STUD ENDS
	SAE-J1926/3	CONNECTIONS FOR GENERAL USE AND FLUID POWER - PORTS AND STUD ENDS WITH ISO725 THREADS AND O-RING SEALING

		- PART 3: LIGHT-DUTY (L SERIES) STUD ENDS
	SAE-J2244/1	CONNECTIONS FOR FLUID POWER AND GENERAL USE - PORTS AND STUD ENDS WITH ISO 261 THREADS AND O-RING SEALING PART 1: PORT WITH O-RING SEAL IN TRUNCATED HOUSING
	SAE-J2244/2	CONNECTIONS FOR FLUID POWER AND GENERAL USE - PORTS AND STUD ENDS WITH ISO 261 THREADS AND O-RING SEALING PART 2: HEAVY-DUTY (S SERIES) STUD ENDS - DIMENSIONS, DESIGN, TEST METHODS, AND REQUIREMENTS
Power Transmission	MIL-DTL-17111D	FLUID, POWER TRANSMISSION
	MIL-STD-419D	CLEANING AND PROTECTING PIPING, TUBING, AND FITTINGS FOR HYDRAULIC POWER TRANSMISSION EQUIPMENT
	ASME-B15.1	MECHANICAL POWER TRANSMISSION APPARATUS, SAFETY STANDARD FOR
	ASME-B29.1M	CHAINS, ATTACHMENTS, AND SPROCKETS, PRECISION POWER TRANSMISSION ROLLER
	MIL-PRF-62178B	POWER PACKAGE: AVDS 1790-2C, 2CA, 2D OR 2DA ENGINE WITH CD850-6A OR 6A1 TRANSMISSION
	DOD-C-24621/3	COUPLERS, FIBER OPTIC CABLE, CABLE SPLITTER, PASSIVE, GLASS-PIGTAILED OUTPUT: TYPE II, 820 TO 910 NANOMETERS WAVELENGTH RANGE, 20 X 20 PORT TRANSMISSION STAR, 100/140 AND 50/125 MICROMETER FIBER (NO S/S DOCUMENT)
	MIL-T-62134B(2)	TRANSMISSION, POWER SHIFT, COMMERCIAL MODIFIED (NO S/S DOCUMENT)
	MIL-STD-188-340	EQUIPMENT TECHNICAL DESIGN STANDARDS FOR VOICE ORDERWIRE MULTIPLEX (NO S/S DOCUMENT)
	MIL-S-7470A	SHAFT, POWER TRANSMISSION, AIRCRAFT ACCESSORY, GENERAL SPECIFICATION FOR

A-A-52317A	DUAL TRANSMISSION MEDIA DATA COMMUNICATION SYSTEM (DTMDCS)
MIL-HDBK-417	FACILITY DESIGN FOR TROPOSPHERIC SCATTER (TRANSHORIZON MICROWAVE SYSTEM DESIGN) (NO S/S DOCUMENT)
MS500065B	TRUCK, WRECKER: MEDIUM, 5 TON, 6X6, MILITARY DESIGN, M543A2 (NO S/S DOCUMENT)
MS52211A	TANK, CHASSIS M48A5 TRANSPORTER AVL BRIDGE (NO S/S DOCUMENT)
MS52210	TANK CHASSIS M48 DIVADS GUN SYSTEM (NO S/S DOCUMENT)
MS52106B	TRUCK, CARGO, 8 TON, 4 X 4 M520 (NO S/S DOCUMENT)
MIL-DTL-3928/16B	SWITCHES, RADIO- FREQUENCY TRANSMISSION LINE (COAXIAL) (ELECTRICALLY OPERATED) CLASS 5, 1P3T
MIL-DTL-3928/11C	SWITCH, RADIO FREQUENCY TRANSMISSION LINE (COAXIAL) (ELECTRICALLY OPERATED) CLASS 7
A-A-52316B	TESTER, DENSITY AND MOISTURE (SOIL AND ASPHALT), NUCLEAR METHOD
MIL-S-3928/23A	SWITCHES, RADIO FREQUENCY TRANSMISSION LINE (COAXIAL) (ELECTRICALLY OPERATED) CLASS 4, 2P2T (NO S/S DOCUMENT)
MIL-W-17265/5	WINCH, DRUM, POWER OPERATED (SADDLE WINCH, INDEPENDENTLY OPERATED DRUMS, TYPE 5.0-S-2ID) (NO S/S DOCUMENT)
MIL-A-516J(I2)	AUGER, EARTH, SKIDMOUNTED; AND AUGER, EARTH, TURNTABLE BASE MOUNTED, POWER DRIVEN (NO S/S DOCUMENT)
A-A-838	MOWER, ROTARY RIDING (7 HP, 3 SPEED, ELECTRIC START) (NO S/S DOCUMENT)
A-A-839	MOWER, ROTARY RIDING (7 HP, 3 SPEED, RECOIL START) (NO S/S DOCUMENT)
A-A-840	MOWER, ROTARY RIDING (10 HP, 3 SPEED, ELECTRIC START)

		(NO S/S DOCUMENT)
	MIL-HDBK-332	EVALUATION OF HIGH FREQUENCY ANTENNAS IN AN OPERATIONAL ENVIRONMENT (NO S/S DOCUMENT)
	MIL-T-81490A	TRANSMISSION LINES, TRANSVERSE ELECTROMAGNETIC MODE
	MIL-HDBK-414	TECHNICAL CONTROL FACILITIES AND EQUIPMENT FOR LONG HAUL COMMUNICATIONS VOLUME 1 OF 2 VOLUMES (NO S/S DOCUMENT)
	MIL-R-22762(5)	RECEIVER-TRANSMITTER RADIO RT-546/ASQ-19, RT-546A/ASQ-19, RT-853/ASQ-19 AND RT-546B/ASQ-19 (NO S/S DOCUMENT)
	MIL-C-49206A	CONTROL, COMMUNICATIONS MODE SELECTOR, CMSC, C-10377()/GTC (NO S/S DOCUMENT)