

The latest test methods should be used unless otherwise indicated by specific method year. On those parameters where 'no detectable' is listed, the lowest possible levels are expected with no intentional additions of this additive or contaminant. Where multiple methods are indicated, the manufacturer should assure the product conforms to the most precise method listed.

PROPERTIES	UNITS	ISO	ASTM	JIS	OTHER
Cetane Number		5165	D613	K 2280	D6890, D7170 ⁽¹⁾
Cetane Index		4264	D4737	K 2280	
Density @ 15°C	kg/m ³	3675 12185	D4052	K 2249	
Viscosity @ 40°C	mm ² /s	3104	D445	K 2283	
Sulphur content	mg/kg	20846 20884	D5453 D2622	K 2541	
Total aromatic content	% m/m		D5186		EN 12916
PAH content (di+, tri+)	% m/m		D5186		EN 12916, D2425
T90, T95, FBP	°C	3405, 3924	D86	K 2254	D2887
Flash point	°C	2719	D93	K 2265	D56
Carbon residue	% m/m	10370	D4530	K 2270	
Cold Filter Plugging Point (CFPP)	°C		D6371	K 2288	EN 116, IP 309
Low Temperature Flow Test (LTFT)	°C		D4539		
Cloud Point (CP)	°C	3015	D2500	K 2269	D5771, D5772, D5773
Water content	mg/kg	12937	D6304	K 2275	
Oxidation stability					
Method 1	g/m ³	12205	D2274		
Method 2a (Rancimat, modified)	induction time (hours)				EN 15751
Method 2b (Delta TAN) ⁽²⁾	mg KOH/g		D664 & D2274 (modified)		
Method 2c (PetroOxy)	minutes				EN 16091
Foam volume	ml				NF M 07-075
Foam vanishing time	sec.				NF M 07-075
Biological growth					NF M 07-070, IP385
FAME content	% v/v		D7371		EN 14078
Ethanol/Methanol content	% v/v		D4815 (modified)		
Total acid number (TAN)	mg KOH/g	6618	D664		
Ferrous corrosion			D665 ⁽³⁾		
Copper corrosion	merit	2160	D130	K 2513	
Appearance			D4176		Visual inspection
Ash content	% m/m	6245	D482 ⁽⁴⁾	K 2272	
Particulate contamination, total	see test method		D6217 FAME-free (mg/l) D7321 with FAME (mg/l)		EN 12662 (mg/kg)
Particulate contamination, size distribution	code rating no. of particles/ml 4407 & 11500	4406	D7619		
Injector cleanliness, Method 1	% air flow loss				CEC (PF-023) TBA
Injector cleanliness, Method 2	% power loss				CEC-F-098 ⁽⁵⁾
Lubricity (HFRR wear scar diameter @ 60°C)	micron	12156-1.3	D6079		CEC F-06-A, D7688
Trace metal content					ICP, D7111 modified

⁽¹⁾ ASTM D6890 and D7170 measure Derived Cetane Number (DCN) and are being widely used as alternatives to D613.

⁽²⁾ Measure Acid Number using D664 before and after aging fuel per D2274 (modified – 115°C).

⁽³⁾ Procedure A.

⁽⁴⁾ Minimum 100 g sample size.

⁽⁵⁾ CEC has initiated test development for Internal Diesel Injector Deposits (IDID).