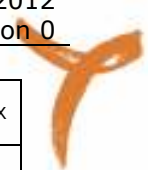


International standard fuel specification comparison

Diesel fuel specification comparison				
Property	SANS 342	EN 590	ASTM 975	Caterpillar
Cetane number	45 min	52 to 54	40 min	40 min
	ASTM D613	ISO 5165	ASTM D613	ASTM D613
Flash point °C	55 min	55 min	52 min	55 min
	IP 34	EN 22719	ASTM D93	ISO 2719
Lubricity (corrected wear scar diameter)	460 max	460 max	520 max	460 max
	Wsd 1,4 at 60°C	ISO 12156-1	ASTM D6079	ASTM D6079
Sulphur content mg/kg	500	500 (Euro 4)	500 max	500 max
	XRF	ISO/DIS 14596	ASTM D 129	ASTM D5453
Copper strip corrosion 3h at 100°C	1 max	Class 1	3 max	3 max
	(IP154)	ISO 2160	ASTM D 130	ASTM D130; ISO2160
Cold filter plugging point	-4max; 3 max	-5 max	location	6°C below ambient
	IP 154	EN116	ASTM D 2500	ASTM D97; ISO 3016
Carbon residue on 10%, % distillation residue	0,2 max	0,2 max	0,35 max	0,2 max
	IP 14	ISO 10370	ASTM D524	ASTM D 524; ISO 4262
Ash content %	0,01 max	0,01 max	0,01 max	0,02 max
	IP 4	ISO 6245	ASTM D 482	ISO 6245
Water content %	0,05 max	0,05 max		0,1 max
	ASTM D 4377	ISO 12937		ASTM D1744
Viscosity at 40°C mm ² /s	2,2 to 5,3	2,5 to 3,5	1,9 to 4,1	1,4 min to 20 max
	IP 71	ISO 3104	ASTM D445	
Density kg/l	0,8000 min	0,833 to 0,837	-	
	IP 365 (20°C)	15°C ISO 3675 (15°C)	ASTM D1298	



Distillation temperature, °C for 90% recovery	362 max	345 to 350	282 to 338	360 min to 362 max
	ASTM D86	ISO 3405 (95°C)	ASTM D86	ISO 3405
Total contamination mg/kg	24 max			
Oxidation stability	2,0 max	0,025 max		
	mg/100ml	ISO 12205 mg/ml		
Polycyclic aromatic carbons % wt		3,0 to 6,0		35 max
		IP 391, EN 12916		ASTM D 1319
Neutralisation (strong acid number)mg KOH/g		0,02		
		ASTM D974-95		
Gums and resins mg/100ml				10 max
				ASTM D473; ISO 6246
Sediment % wt				0,05
				ASTM D473; ISO3735
Water and sediment % vol			0,05 max	
			ASTM D2709	
Cetane Index			40 min	
			ASTM D976	