











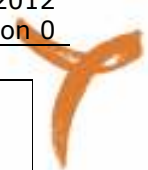









Centron impact on international standard fuel specifications

Diesel fuel specification comparison			
Property	National standard	Centron effect	Comments
Cetane number	45 min	 48 to 50	Centron increase Cetane number by 3 to 5. More power and smoother running. Easier start.
Flash point °C	55 min	 63	Centron increases the flash point by 3 to 5. See Cetane.
Lubricity (corrected wear scar diameter)	460 max	 385	Centron increases lubricity significantly. This is important when low sulphur fuels are used. Centron reduces wear on injectors and pumps.
Sulphur content mg/kg	500	 500	Centron contains zero sulphur and therefore has no impact on sulphur.
Copper strip corrosion 3h at 100°C	1 max	 Class 1	Centron has no impact on corrosion.
Cold filter plugging point	-4max; 3 max	 -10	Centron improves cold flow and clouding by 5 to 10°C.
Carbon residue on 10%, % distillation residue	0,2 max	 0,01	Centron reduces carbon residue due to the surfactant and more complete burn.
Ash content %	0,01 max	 0,01	Centron has zero ash content.
Water content %	0,05 max	 0,05	Centron has zero water content but is an emulsifier and will emulsify water in diesel.
Viscosity at 40°C mm ² /s	2,2 to 5,3	 3	Centron contains mineral seal oil that increases the viscosity. This improves the lubricity.
Density kg/l	0,8000 min	  0,833 to 0,837	Centron density (0,836kg/l) falls within all diesel density ranges and therefore normally does not increase density.



Distillation temperature, °C for 90% recovery	362 max	 345 to 350	Centron increases slightly.
Total contamination mg/kg	24 max		Centron has zero contamination
Oxidation stability mg/100ml	2,0 max	 0,025 max	Centron improves the stability through Tergitol NP-4. Centron is an excellent fuel stabilizer.
Polycyclic aromatic carbons % wt	3,0 to 6,0	 3,0 to 6,0	Centron normally increases the aromatic carbons but reduces them during combustion.
Gums and resins mg/100ml	10	 0	Centron does not produce gums and resins.
Sediment % wt	0,05	 0	Centron has no sediment and does not produce sediment.
Water and sediment % vol	0,1	 0	Centron has no water or sediment.