

STANDARD SPECIFICATION OF DIESEL EN590 - 50 ppm

Diesel Fuel

Specifications for common storage of Diesel Fuel. Requirements. Test Methods and Threshold Values.

Specifications	Unit	Threshold values acc to DIN EN 590	Requirements not specified / stricter than DIN EN 590	Test method
Appearance	-----	-----	Clear at 20 °C (01.03.-31.10.) Clear at 10 °C (01.11.-29.02.) (free from any visible water and solid foreign particles)	Visual
Colour	-----	-----	Max. 2	DIN ISO 2049
Density at 15°	kg/m ³	Min. 820 max. 845	-----	EN ISO 3675:1998 EN ISO 12185:1996
Cetane (acc. to CFR) Number (acc. to BASF)	-----	min. 51 min. 52.2	-----	EN ISO 5165:1998 DIN 51773
Cetane index	-----	min. 46	-----	EN ISO 4264
Viscosity at 40 °C	mm ² /S	2 – 4,5	-----	EN ISO 3104
Flashpoint	°C	min. 55	min. 59	EN 22719
Neutralisation number	mg KOH/g	-----	max. 0.2	DIN 51558 Part 1
Corrosive effect on copper (3h at 50 °C degree	Corrosion	max. 1	-----	EN ISO 2160
Total contamination, indicated as mass concentration	mg/kg.	max. 24	-----	EN 12662
Oxidation stability, indicated as mass concentration	g/m ³	max.	-----	EN ISO 12205
Sulphur Content	mg/kg	max. 50	-----	EN ISO 20884 EN ISO 20846 ASTM D 5453 DIN 51400-T11
Carbon residue distillation residue	% (m/m)	Max. 0,3	-----	EN ISO 10370
Ash Content	% (m/m)	Max. 0,01	-----	EN ISO 6245
Distillation at 250 °C 350 °C at 95%	Vol. % Vol. % Vol. %	< 65 Min. 85 --- Max. 360 °C	----- ----- -----	prEN ISO 3405:1998
Lubricity Micrometer	Micrometer	Max. 460	-----	ISO12156-1
Conductivity at 20 °C	Ps/M	-----	Min.50 ps/M	DIN 51412-2 ASTM D 2624
Polycyclic aromatic hydrocarbons (PAH)	% (m/m)	max. 11 %	-----	EN 12916 IP 391/95
Water content	mg/kg	max. 200	-----	prEN ISO 12937:1996
Fatty acid methyl ester Content (FAME)***	% V/V	max. 5	-----	EN 14078
Cold flow properties* 01.03.-14.04. 15.04.-14.09 15.09.-14.10. 15.10.-31.10. 01.11.-28.02.**	°C	CFPP -10 (01.03.14.04.) .0 (15.04.-30.09.) -10 (01.10.-15.11.) -20 (16.11.-28.02.)	CP/CFPP 3/-13 +5/-2 -3/-13 -3/-13 -7/-22	ISO 3015 EN 116 / IP 309

*** Shipping date from shipping point.

*** Addition of max. 500 ml/1000 l flow improver or addition of at least 150 ml/1000 l WASA, depending on storage site.

*** FAME must meet the EN14214 requirements.

Diesel fuel must not be treated with acid and/or alkaline solution.

Diesel fuel must be free from PCBs and/or other aromatic organically bound chlorine.

Otherwise all other requirements stipulated in DIN EN 590 (the most recent edition in each case) apply.

Appropriate measures taken by the manufacturer/supplier ensure that when applying ISO 4259 the requirements of this specification are met.