



STANDARD SPECIFICATION OF DIESEL EN590

Diesel Fuel

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

SPECIFICATIONS	UNIT	THRESHOLD VALUES ACC TO DIN EN590	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. 10	-----	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.