



ATTOCK REFINERY LTD

TECHNICAL DATA SHEET

HIGH SPEED DIESEL (HSD)

Product Description:

Diesel is a middle distillate fuel with sulfur content of less than 500 parts per million (ppm), making it suitable for use in automotive (both on & off road) and industrial applications. This low sulfur diesel also results in reduced emission. Attock Refinery Limited produce high-speed diesel that's conforms the Pakistan Standards & Quality Control Authority and Ministry of Petroleum and Natural Resources specifications.

Application and Benefits:

Diesel is suitable for all diesel fuelled engines in mobile, portable and stationary application including

- High-speed diesel engines (those operating at greater than 800 rpm)
- In service involving frequent and relatively wide variation in loads and speeds
- In automotive both on & off road
- Industrial applications

Attock Refinery Limited diesel is designated to prevent the buildup of the posits on vehicle injectors, so that the engine will maintain power and fuel economy over time. Diesel is designed to reduce total emission levels, as well as reducing fuel system corrosion.

Health, Safety and Environment:

Health, safety and environmental information are provided for this product in the Safety Data Sheet. This gives details of the potential hazards, precautions and First Aid measures. Attock Refinery Ltd will not accept liability if the product is used other than in the manner or with the precautions or for the purposes specified

- **Typical information from MSDS**

Do not ingest. Never siphon by mouth. If ingested, do not induce vomiting. Avoid contact with skin and clothing. Wash thoroughly after handling. Avoid contact with eyes. Use only with adequate ventilation.

Storage:

All packages should be stored under cover. Keep containers closed and clearly labeled. The storage area should comply with NFPA 30.



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Specifications & Typical Value:

TEST DESCRIPTION	UNIT	TEST METHOD	SPECIFICATIONS	MAX / MIN	ARL TYPICAL
Specific gravity 15.6oC (60°F)	-	D1298	To be reported	-	0.8380
Colour	°C	D1500	3.0	Max.	0.5
Flash point	°C	D93	54	Min.	61.0
Cloud Point					
a) Summer (March-Oct)	°C	D2500	9	Max.	6
b) Winter (Nov-Feb)			6	Max.	3
CFPP					
a) Summer (March-Oct)	°C	IP309 / ISO3016	9	Max.	3
b) Winter (Nov-Feb)			6	Max.	0
Pour Point					
a) Summer (March-Oct)	°C	D97	6	Max.	3
b) Winter (Nov-Feb)			3	Max.	-3
Cetane Index (calculated)	-	D976	45	Min.	49
Sulphur	wt% (ppm)	D4294 / D129	0.05 (500)	Max.	< 350
Copper strip 3 hrs corrosion at 100°C	-	D130	1	Max.	1a
Conradson carbon % wt of 10% residue	wt%	D189	0.20	Max.	0.004
Sediment	wt%	D473	0.01	Max.	0.007
Water	wt%	D95	0.05	Max.	0.025
Ash contents	wt%	D482	0.01	Max.	0.008
Neutralization value:					
a) Total acid No	mg KOH/gm	D974	0.5	Max.	0.2
b) Strong acid No			Nil	-	Nil
Viscosity, Kinematic at 40°C	cSt	D445	1.50	Min.	2.525
			6.50	Max.	3.221
Distillation:					
a) 50% Vol% recovery	°C	D86	Report	-	262
b) 90% Vol% recovery			365	Max.	350

For more Information Please Contact **Attock Refinery Ltd.** Phone: 92-51-5487041 / Ext. 2596 / 2469