



BUILDING AMERICA®

Fuel Specifications and Pricing

Specifications for C.S. 26-D Diesel Fuel Oil (ASTM D-975): General Statement

This specification covers two fuel grades:

- › No. 1-D for small diesel engines (Min. 45 Cetane) and
- › No. 2-D for diesel locomotives (Min. 40 Cetane).

The fuels shall be free from grit, acid, microbial growth and fibrous or other foreign material likely to clog pipes and strainers or damage injectors. In addition, the fuel should pass EMD Filtration Cleanliness Test-M.I. 1750.

The fuels in this specification shall be stable as listed under service requirements in engine operation and storage.

Rejection

Any samples of fuel delivered failing to meet these specifications shall be rejected and the shipment returned to the manufacturers, who shall pay the freight both ways.

Physical Requirements

	ASTM Test Method	No. 1-D	No. 2-D
Flash °F, Min	D93	100	125
Water & Sediment, Vol.% Max.	D1796	0.05	0.05
Carbon Residue 10% Bot. Max.	D524	0.15	0.35
Ash, Wt.% Max.	D482	0.01	0.01
Distillation,IBP Min. (2)	D86		350
10 Max. (2)		425	
90 Max.		540	640
EP Max. (2)		600	700
Recovery, Min. % (2)		99	99
Vis. SUS at 100°F Min.	D88	30.5	32.6
Vis. SUS at 100°F Max.		34.4	40.1
SulfurWt. % Max. (3)	D1552	.05	0.5
Copper Strip Corrosion, Max. 3 hours at 212°F	D130	No. 3	No. 3
Cetane No. Min.	D613	45(4)	40
Cloud Point °F Max.	D2500		
Pour Point °F Max.	D97		
API Gravity (2)	D287	35-45	30-40

Cloud & Pour Point Requirements

Region	Summer 3/1-10/31		Winter 11/1-2/1	
	Cloud Point	Pour Point	Cloud Point	Pour Point
Pacific Northwest	+25	+20	+12	-30
Pacific Southwest	+25	+20	+12	-10
Rocky Mountain	+36	10	+12	-30
Mid-Continent	+14	10	+12	-20
North Platte	+14	0	+12	*0
Midwest	+15	0	+5	-20
Gulf Coast	+20	10	+12	0

*Pour Point Depressant is added by railroad at North Platte to -30Å°F.

Service Requirements

Fuels may contain stabilizing and metal deactivating additives approved by the general research & development engineer, in order to meet requirements.

Use of any additive that contributes to pollution of the air and is in violation of state or Federal regulations in the railroad operating area is prohibited.

All fuels shall be stable and shall be compatible with other conventional grades of diesel engine fuel oil.

A maximum rating of 5 is required for acceptance of the fuel oil when tested according to the modified Union Pacific 300°F, 90-minute stability test.

Pipeline Deliveries

In addition to fulfilling other requirements, fuel oil delivered by pipeline shall be treated with sufficient corrosion inhibitor to produce an NACE rating of B++.

Notes

1. Minimum allowable flash point is not valid if any legal standard specifies a higher limit for the state in which oil is delivered.
2. Additional requirements not part of ASTM D-975.
3. Maximum allowable sulfur is not valid if any legal standard specifies a lower limit for the state in which the oil is delivered.
4. More stringent than ASTM D-975.

Fuel Pricing

Each day prices from diesel fuel suppliers are accumulated into a daily fuel price report showing the current prices of any supplier with an active purchase order from Union Pacific.

The daily fuel price report is used to determine the next day's supplier. For this reason, pricing notices should be received in the Fuel Group by 4:00 p.m. each business day. Factors considered in the selection of a supplier are transportation, taxes and quantities to be supplied, as well as the fuel cost.

Daily Fuel Price Updates from Suppliers

Daily fuel price updates arrive from suppliers in several different ways:

- › By FAX to (402) 271-3025
- › By Data Transmission Network (DTN)
- › Telephoned to Fuel Group staff followed by an original letter from the supplier via Western Union

Price Update Notifications

Notifications of price updates should always include the following information:

- › Effective day of the prices
- › Purchase order number and location for which prices are being quoted
- › Supplier's name, address, telephone number and FAX number
- › Supplier contact person
- › New quoted price