SHELL CANADA PRODUCT QUALITY SPECIFICATION SYSTEM

Specification Sheet

Product Name: **TYPE B – R30 ULTRA LOW SULPHUR DIESEL FUEL**
TYPE B – R30 DIESEL FUEL
(MAY BE DYED OR UNDYED FOR TAX PURPOSES)

Issued: 01-Jun-2022

Cancels: NEW

◆ SPECIFICATION ◆

Spec Characteristic	Units	ASTM Method	Minimum	Maximum
Appearance		D4176 – Proc. 1	Clear & Bright	
Ash	% by mass	D482		0.010
Cetane Number		D613	40.0	
Cloud Point	°C	D5773	Seasonal [1]	
Conductivity	pS/m	D2624	25 [2]	
Copper Strip Corrosion, 3 h at min 50 °C		D130		No. 1
Distillation	°C	D86		
90 % recovered				360.0
Flash	°C	D93	40.0	
Lubricity			Satisfactory [3]	
Carbon Residue on 10% bottoms	% by mass	D4530		0.2
Sulphur	mg/kg	D5453		15
Total Acid No.	mg KOH/g	D974		0.10
Viscosity at 40 °C	cSt	D445	1.70 [4]	3.60
Water & Sediment	% by volume	D1796-Mod. or D2709		0.02

◆ COMMENTS ◆

Approval Comments

Meets: The latest edition and amendment of CAN/CGSB-3.517 “Diesel Fuel” Type B when supplied to meet the 2.5 % low-end design temperature for the period and location of intended use.

May contain up to 5% by volume Biodiesel (FAME or Fatty Acid Methyl Esters) when the 2.5% low-end design temperature is warmer than -18°C.

If the fuel contains over 1.0% by volume biodiesel then the product meets the latest edition and amendment of CAN/CGSB-3.520 “Automotive Diesel Fuel containing Low Levels of Biodiesel (B1-B5)” Type B.

The latest edition and amendment of CAN/CGSB-3.2 “Heating Oil” Type 2

Notes:

1. Low temperature flow properties (cloud point) of the fuel, as supplied, shall meet the 2.5 % low-end design temperature for the period and location of intended use.
2. Minimum electrical conductivity at point, time and temperature of delivery to purchaser.
3. Lubricity shall satisfy the requirements as listed in CAN/CGSB-3.517 or CAN/CGSB-3.520.
4. If the fuel is designed for an operability temperature of colder than -10°C then the minimum allowable viscosity shall be 1.50 cSt. If the fuel is designed for an operability temperature colder than -20°C then the minimum allowable viscosity shall be 1.30 cSt.

SHELL CANADA PRODUCT QUALITY SPECIFICATION SYSTEM

Specification Sheet

Product Name: **TYPE B – R50. ULTRA LOW SULPHUR DIESEL FUEL**
TYPE B – R50. DIESEL FUEL
(MAY BE DYED OR UNDYED FOR TAX PURPOSES)

Issued: 23-Sep-2022

Cancels: NEW

◆ SPECIFICATION ◆

Spec Characteristic	Units	ASTM Method	Minimum	Maximum
Appearance		D4176 – Proc. 1	Clear & Bright	
Ash	% by mass	D482		0.010
Cetane Number		D613	40.0	
Cloud Point	°C	D5773	Seasonal [1]	
Conductivity	pS/m	D2624	25 [2]	
Copper Strip Corrosion, 3 h at min 50 °C		D130		No. 1
Distillation 90 % recovered	°C	D86		 360.0
Flash	°C	D93	40.0	
Lubricity			Satisfactory [3]	
Carbon Residue on 10% bottoms	% by mass	D4530		0.2
Sulphur	mg/kg	D5453		15
Total Acid No.	mg KOH/g	D974		0.10
Viscosity at 40 °C	cSt	D445	1.70 [4]	3.60
Water & Sediment	% by volume	D1796-Mod. or D2709		0.02

◆ COMMENTS ◆

Approval Comments

Meets: The latest edition and amendment of CAN/CGSB-3.517 “Diesel Fuel” Type B when supplied to meet the 2.5 % low-end design temperature for the period and location of intended use.

If the fuel contains over 1.0% by volume biodiesel, then the product meets the latest edition and amendment of CAN/CGSB-3.520 “Automotive Diesel Fuel containing Low Levels of Biodiesel (B1-B5)” Type B.

The latest edition and amendment of CAN/CGSB-3.2 “Heating Oil” Type 2

Notes:

1. Low temperature flow properties (cloud point) of the fuel, as supplied, shall meet the 2.5 % low-end design temperature for the period and location of intended use.
2. Minimum electrical conductivity at point, time and temperature of delivery to purchaser.
3. Lubricity shall satisfy the requirements as listed in CAN/CGSB-3.517 or CAN/CGSB-3.520.
4. If the fuel is designed for an operability temperature of colder than -10°C then the minimum allowable viscosity shall be 1.50 cSt. If the fuel is designed for an operability temperature colder than -20°C then the minimum allowable viscosity shall be 1.30 cSt.

SHELL CANADA PRODUCT QUALITY SPECIFICATION SYSTEM

Marketing Specification Sheet

Product Name: **TYPE B – R100 ULTRA LOW SULPHUR DIESEL FUEL**
(MAY BE DYED OR UNDYED FOR TAX PURPOSES)

Issued: 16-Nov-2022

Cancels: NEW

◆ SPECIFICATION ◆

Spec Characteristic	Units	ASTM Method	Minimum	Maximum
Appearance	-	D4176 – Proc. 1	Clear & Bright	
Ash	% by mass	D482		0.010
Cetane Number	-	D613	40.0	
Cloud Point	°C	D5773	Seasonal [1]	
Conductivity	pS/m	D2624	25 [2]	
Copper Strip Corrosion, 3 h at min 50 °C	-	D130		No. 1
Distillation, 90 % recovered	°C	D86		360.0
Flash Point	°C	D93	40.0	
Lubricity	-	Various	Satisfactory [3]	
Carbon Residue on 10% bottoms	% by mass	D4530		0.2
Sulphur	mg/kg	D5453		15
Total Acid No.	mg KOH/g	D974		0.10
Viscosity at 40 °C	cSt	D445	1.70 [4]	3.60
Water & Sediment	% by volume	D1796-Mod. or D2709		0.02
Low Carbon Fuel Content	**Units**	**ASTM Method**	**Minimum**	**Maximum**
Renewable Diesel Content (e.g. HDRD)	% by vol	N/A	99	100

◆ COMMENTS ◆

Approval Comments

I. This product shall meet:
   a. CAN/CGSB-3.517 Diesel Fuel Type B, latest edition including all amendments when dosed with the correct amount of lubricity additive.
   b. EN 15940 Paraffinic diesel fuel from synthesis or hydrotreatment Class B, latest edition including all amendments when dosed with the correct amount of lubricity additive.

II. This product shall contain no FAME (biodiesel).

III. The latest edition and amendment of CAN/CGSB-3.2 “Heating Oil” Type 2.

Notes:

1. Low temperature flow properties (cloud point) of the fuel, as supplied, shall meet the 2.5 % low-end design temperature for the period and location of intended use.
2. Minimum electrical conductivity at point, time, and temperature of delivery to purchaser.
3. Lubricity shall satisfy the requirements as listed in CAN/CGSB-3.517 or CAN/CGSB-3.2. When using D6079 or D7688 the maximum wear scar shall diameter be 460um. D6079 will be the referee test method.
4. If the fuel is designed for an operability temperature of colder than -10°C then the minimum allowable viscosity shall be 1.50 cSt. If the fuel is designed for an operability temperature colder than -20°C then the minimum allowable viscosity shall be 1.30 cSt.