

Boscan

Reference ID

Origin: Venezuela

Data from OGJ 99 were originally published in 1983 as part of a series entitled "Guide to Export Crudes for the '80s".

API Gravity

10.9 ESD 92
10.1 OGJ 99

Equation(s) for Predicting Evaporation

$$\%Ev = (-0.15 + 0.013T)\sqrt{t}$$

Where %Ev = weight percent evaporated; T = surface temperature (°C); t = time (minutes)

ESD 98

Sulphur (weight %)

5.50 OGJ 99
4.60 ESD 93

Flash Point (°C)

57 ESD 92

Density (g/mL)

Temperature

(°C)

0

1.0030

ESD 92

15

0.9930

Pour Point (°C)

21 ESD 92
10 OGJ 99

Dynamic Viscosity (mPa-s or cP)

Temperature

(°C)

0

8826000

ESD 92

15

485500

Saybolt Viscosity (SUS)

Temperature

(°C)

38

90000

OGJ 99

Hydrocarbon Groups (weight %)

Saturates

25

ESD 96

Aromatics

35

Resins

22

Asphaltenes

18

Waxes

4

ESD 92

Adhesion (g/m²)

818 SD = 61 ESD 96

Volatile Organic Compounds (ppm)

Benzene

120

ESD 94

Toluene

180

Ethylbenzene

120

Xylenes

300

C3-benzenes

720

Total BTEX

720

Total VOCs

1440

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Boiling Point Distribution (weight %)

Boiling Point (°C)	Weight %
120	1
140	1
160	2
180	2
200	3
250	6
300	9
350	15
400	21
450	28
500	36
550	46
600	55
650	64
700	73

ESD 94

Boiling Point Distribution (°C)

Weight %	Boiling Point (°C)
5	
10	
15	
20	
25	
30	
35	
40	
45	
50	
55	
60	
65	
70	
75	

ESD 94

Yield on Crude (volume %)

Boiling Range (°C)	Yield %
Light naphtha (28-93)	1
Heavy naphtha (93-149)	1
Naphtha (149-178)	1
Kerosene (178-204)	1
Gas oil (204-260)	4
Gas oil (260-288)	3
Gas oil (288-343)	6
Residue (>343)	83

OGJ 99

Metals (ppm)

Aluminum	69.9
Barium	0.5
Cadmium	<0.5
Calcium	470.0
Chromium	<1.5
Cobalt	<1
Copper	1.6

Cao 92

Boscan

Metals (ppm)			Reference ID
	Iron	56.0	Cao 92
	Lead	<3	
	Magnesium	16.3	
	Manganese	0.5	
	Mercury	<15	
	Molybdenum	4.7	
	Nickel	117.0	
	Selenium	<15	
	Strontium	1.6	
	Tin	<15	
	Titanium	<0.6	
	Vanadium	1320.0	
	Zinc	4.7	

Acute Toxicity of Water Soluble Fraction (mg/L)			
	48h LC50	Test Organism	
	(a) results based on GC headspace analysis	Daphnia magna	>1.06 (a) Harris 94