

Udang

Reference ID

Origin: Indonesia

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

API Gravity

14.3 ESD 92
38.0 OGJ 99

Equation(s) for Predicting Evaporation

Short term (<5 days): %Ev = $(-0.14 + 0.013T)\sqrt{t}$
Long term: %Ev = $(0.06 + 0.045T)\ln(t)$
Where %Ev = weight percent evaporated; T = surface temperature (°C); t = time (minutes)

ESD 99

Sulphur (weight %)

0.05 OGJ 99
0.94 ESD 93

Water Content (weight %)

1.0 ESD 98

Flash Point (°C)

>90 ESD 92

Reid Vapour Pressure (kPa)

0 OGJ 99

Density (g/mL)

Temperature
(°C)

0 0.9800 ESD 92
15 0.9701

Pour Point (°C)

3 ESD 92
38 OGJ 99

Dynamic Viscosity (mPa·s or cP)

Temperature
(°C)

0 81890 ESD 92
15 10700

Kinematic Viscosity (mm²/s or cSt)

Temperature
(°C)

54 9 OGJ 99

Emulsion Formation

Visual stability entrained ESD 98
Viscosity (mPa·s) 32000
Complex modulus (Pa) 130
Water content (wt %) 37

Chemical Dispersibility (volume %)

Corexit 9500 7 ESD 98

Hydrocarbon Groups (weight %)

Saturates 32 ESD 97
Aromatics 41
Resins 24
Asphaltenes 3

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Hydrocarbon Groups (weight %)			Reference ID
Waxes	1		ESD 98
Adhesion (g/m ²)			
	97	SD = 21	ESD 96
Volatile Organic Compounds (ppm)			
Benzene	0		ESD 94
Toluene	0		
Ethylbenzene	0		
Xylenes	0		
C3-benzenes	0		
Total BTEX	0		
Total VOCs	0		
Surface Tension (mN/m or dynes/cm)			
Temperature (°C)			
0	NM		ESD 92
15	32.2		
Oil/Salt Water Interfacial Tension (mN/m or dynes/cm)			
Temperature (°C)			
0	NM		ESD 92
15	25.4		
Oil/Fresh Water Interfacial Tension (mN/m or dynes/cm)			
Temperature (°C)			
0	NM		ESD 92
15	32.5		
Boiling Point Distribution (weight %)			
Boiling Point (°C)	Weight %		
160	1		ESD 94
180	2		
200	3		
250	8		
300	15		
350	25		
400	35		
450	48		
500	59		
550	68		
600	76		
650	83		
700	89		
Boiling Point Distribution (°C)			
Weight %	Boiling Point (°C)		
5			ESD 94
10			
15			
20			
25			
30			
35			

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Boiling Point Distribution (°C)			Reference ID
Weight %	Boiling Point (°C)		
40			ESD 94
45			
50			
55			
60			
65			
70			
75			
80			
85			
90			

Yield on Crude (volume %)			
Boiling Range (°C)			
C1-C4	1		OGJ 99
Naphtha (32-191)	15		
Kerosene (191-271)	11		
Heavy distillate (271-371)	19		
Gas oil (371-543)	35		
Residue (>543)	20		

Metals (ppm)			
Barium	1.3		Cao 92
Chromium	<1.5		
Copper	<0.6		
Iron	<3		
Lead	<3		
Magnesium	28.0		
Molybdenum	<0.6		
Nickel	71.0		
	3.5		OGJ 99
Titanium	0.9		Cao 92
Vanadium	26.8		
	0.9		OGJ 99
Zinc	2.1		Cao 92