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Vasconia **Origin:** Colombia

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**API Gravity**

		Reference ID	
	26.3	ESD	98

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**Equation(s) for Predicting Evaporation**

- $\%Ev = (0.84 + 0.045T)\ln(t)$  Where %Ev = weight percent evaporated; T = surface temperature (°C); t = time (minutes)

		Reference ID	
		ESD	98

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**Sulphur (weight %)**

Evaporation (weight %)		Reference ID	
0	0.56	ESD	99
9	0.55	ESD	99
14	0.57	ESD	99
22	0.63	ESD	99

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**Flash Point (°C)**

Evaporation (weight %)		Reference ID	
0	-3	ESD	98
9	54	ESD	98
14	87	ESD	98
22	>100	ESD	98

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**Density (g/mL)**

Temperature (°C)	Evaporation (weight %)		Reference ID	
0	0	0.9087	ESD	98
0	9	0.9304	ESD	98
0	14	0.9416	ESD	98
0	22	0.954	ESD	98
15	0	0.8958	ESD	98
15	9	0.9175	ESD	98
15	14	0.9291	ESD	98
15	22	0.942	ESD	98
25	0	0.888	ESD	98
25	9	0.9096	ESD	98
25	14	0.9213	ESD	98
25	22	0.9347	ESD	98

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#### Pour Point (°C)

	Evaporation (weight %)		Reference ID	
	0	6	ESD	98
	9	17	ESD	98
	14	18	ESD	98
	22	20	ESD	98

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#### Dynamic Viscosity (mPa s or cP)

Temperature (°C)	Evaporation (weight %)			Reference ID	
0	0	851	• (a)	ESD	98
0	0	6647	• (b)	ESD	98
0	0	56370	• (c)	ESD	98
0	9	1462	• (a)	ESD	98
0	9	9281	• (b)	ESD	98
0	9	97170	• (c)	ESD	98
0	14	3650	• (a)	ESD	98
0	14	20500	• (b)	ESD	98
0	14	199200	• (c)	ESD	98
0	22	736000	• (c)	ESD	98
15	0	72		ESD	98
15	9	169		ESD	98
15	14	385		ESD	98
15	22	1490		ESD	98
25	0	21		ESD	98
25	9	54		ESD	98
25	14	112		ESD	98
25	22	301		ESD	98

- Shear rate = (a) 100/s; (b) 10/s; (c) 1/s

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#### Hydrocarbon Groups (weight %)

	Evaporation (weight %)		Reference ID	
Saturates	0	61	ESD	99
Saturates	9	54	ESD	99
Saturates	14	54	ESD	99
Saturates	22	53	ESD	99
Aromatics	0	26	ESD	99
Aromatics	9	31	ESD	99
Aromatics	14	30	ESD	99
Aromatics	22	28	ESD	99
Resins	0	6	ESD	99
Resins	9	6	ESD	99
Resins	14	6	ESD	99
Resins	22	8	ESD	99
Asphaltenes	0	8	ESD	99
Asphaltenes	9	9	ESD	99
Asphaltenes	14	10	ESD	99
Asphaltenes	22	11	ESD	99
Waxes	0	4.5	ESTD	02
Waxes	9	4.6	ESTD	02
Waxes	14	5.1	ESTD	02
Waxes	22	5.3	ESTD	02

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#### Adhesion (g/m<sup>2</sup>)

	Evaporation (weight %)		Reference ID	
	0	39	SD = 4	ESD 98
	9	38	SD = 2	ESD 98
	14	44	SD = 5	ESD 98
	22	60	SD = 6	ESD 98

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#### Volatile Organic Compounds (ppm)

	Evaporation (weight %)		Reference	ID
Benzene	0	245	ESD	98
Benzene	9	9	ESD	98
Benzene	14	0	ESD	98
Benzene	22	0	ESD	98
Toluene	0	625	ESD	98
Toluene	9	242	ESD	98
Toluene	14	2	ESD	98
Toluene	22	0	ESD	98
Ethylbenzene	0	471	ESD	98
Ethylbenzene	9	264	ESD	98
Ethylbenzene	14	31	ESD	98
Ethylbenzene	22	2	ESD	98
Xylenes	0	5456	ESD	98
Xylenes	9	3472	ESD	98
Xylenes	14	661	ESD	98
Xylenes	22	3	ESD	98
C3-benzenes	0	9282	ESD	98
C3-benzenes	9	9641	ESD	98
C3-benzenes	14	5532	ESD	98
C3-benzenes	22	34	ESD	98
Total BTEX	0	6797	ESD	98
Total BTEX	9	3988	ESD	98
Total BTEX	14	695	ESD	98
Total BTEX	22	5	ESD	98
Total VOCs	0	16079	ESD	98
Total VOCs	9	13629	ESD	98
Total VOCs	14	6227	ESD	98
Total VOCs	22	39	ESD	98

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**Surface Tension (mN/m or dynes/cm)**

Temperature (°C)	Evaporation (weight %)		Reference ID	
15	0	28.6	ESD	98
15	9	DNF	ESD	98
15	14	DNF	ESD	98
15	22	DNF	ESD	98
25	0	27.4	ESD	00
25	9	28.6	ESD	00
25	14	29.8	ESD	00
25	22	30	ESD	00

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**Oil/Salt Water Interfacial Tension (mN/m or dynes/cm)**

Temperature (°C)	Evaporation (weight %)		Reference ID	
15	0	25.2	ESD	98
15	9	DNF	ESD	98
15	14	DNF	ESD	98
15	22	DNF	ESD	98
25	0	19.4	ESD	00
25	9	17	ESD	00
25	14	16.2	ESD	00
25	22	NM	ESD	00

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**Oil/Fresh Water Interfacial Tension (mN/m or dynes/cm)**

Temperature (°C)	Evaporation (weight %)		Reference ID	
15	0	24.9	ESD	98
15	9	DNF	ESD	98
15	14	DNF	ESD	98
15	22	DNF	ESD	98
25	0	20.1	ESD	00
25	9	16.1	ESD	00
25	14	13	ESD	00
25	22	NM	ESD	00

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**Boiling Point Distribution (BP vs weight %)**

Boiling Point (°C)	Evaporation (weight %)	Weight %	Reference ID	
40	0	0.5	ESTD	02
60	0	0.9	ESTD	02
80	0	1.8	ESTD	02
80	8	0.1	ESTD	02
100	0	3.9	ESTD	02
100	8	0.3	ESTD	02
120	0	5.8	ESTD	02
120	8	0.9	ESTD	02
120	14	0.1	ESTD	02
140	0	7.9	ESTD	02
140	8	2.1	ESTD	02
140	14	0.2	ESTD	02
160	0	10.5	ESTD	02
160	8	4.3	ESTD	02
160	14	0.8	ESTD	02
180	0	13.1	ESTD	02
180	8	7.1	ESTD	02
180	14	2.4	ESTD	02
200	0	15.6	ESTD	02
200	8	9.7	ESTD	02
200	14	4.6	ESTD	02
200	22	0.3	ESTD	02
250	8	19.6	ESTD	02
250	14	14.6	ESTD	02
250	22	7.3	ESTD	02
300	8	31.7	ESTD	02
300	14	27.4	ESTD	02
300	22	20.2	ESTD	02
350	8	45.1	ESTD	02
350	14	41.5	ESTD	02
350	22	35.3	ESTD	02
400	8	56.6	ESTD	02
400	14	53.7	ESTD	02
400	22	48.4	ESTD	02
450	8	67.8	ESTD	02

450	14	65.4	ESTD	02
450	22	61	ESTD	02
500	8	76	ESTD	02
500	14	74.1	ESTD	02
500	22	70.3	ESTD	02
550	8	82.4	ESTD	02
550	14	80.7	ESTD	02
550	22	77.5	ESTD	02
600	8	87.3	ESTD	02
600	14	85.9	ESTD	02
600	22	83	ESTD	02
650	8	91.6	ESTD	02
650	14	90.3	ESTD	02
650	22	87.6	ESTD	02
250	0	24.7	ESTD	02
300	0	35.8	ESTD	02
350	0	47.9	ESTD	02
400	0	58.4	ESTD	02
450	0	68.5	ESTD	02
500	0	76.1	ESTD	02
550	0	82	ESTD	02
600	0	86.6	ESTD	02
650	0	90.9	ESTD	02

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Viosca Knoll Block 826 **Origin:** Gulf of Mexico, USA

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**API Gravity**

		Reference ID	
31.6		ESD	98

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**Equation(s) for Predicting Evaporation**

- $\%Ev = (2.04 + 0.045T)\ln(t)$  Where %Ev = weight percent evaporated; T = surface temperature (°C); t = time (minutes)

		Reference ID	
		ESD	99

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**Sulphur (weight %)**

Evaporation (weight %)		Reference ID	
0	0.29	ESD	99
8	0.28	ESD	99
17	0.34	ESD	99
24	0.37	ESD	99

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**Water Content (weight %)**

Evaporation (weight %)		Reference ID	
0	0.2	ESD	98
8	<0.1	ESD	98
17	<0.1	ESD	98
24	<0.1	ESD	98

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**Flash Point (°C)**

Evaporation (weight %)		Reference ID	
0	-2	ESD	98
8	41	ESD	98
17	86	ESD	98
24	>95	ESD	98

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#### Density (g/mL)

Temperature (°C)	Evaporation (weight %)		Reference ID	
0	0	0.8788	ESD	98
0	8	0.8966	ESD	98
0	17	0.9087	ESD	98
0	24	0.9185	ESD	98
15	0	0.8668	ESD	98
15	8	0.8842	ESD	98
15	17	0.897	ESD	98
15	24	0.9067	ESD	98
25	0	0.8593	ESD	98
25	8	0.8768	ESD	98
25	17	0.8892	ESD	98
25	24	0.8989	ESD	98

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#### Pour Point (°C)

Evaporation (weight %)		Reference ID	
0	-4	ESD	98
8	6	ESD	98
17	11	ESD	98
24	16	ESD	98

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#### Dynamic Viscosity (mPa s or cP)

Temperature (°C)	Evaporation (weight %)			Reference	ID
0	0	43		ESD	98
0	8	130		ESD	98
0	17	658	• (a)	ESD	98
0	24	1522	• (b)	ESD	98
0	24	4063	• (c)	ESD	98
0	24	26150	• (d)	ESD	98
15	0	16		ESD	98
15	8	43		ESD	98
15	17	132		ESD	98
15	24	325		ESD	98
25	0	11		ESD	98
25	8	22		ESD	98
25	17	48		ESD	98
25	24	91		ESD	98

- (a) slightly non-newtonian Shear rate = (b) 100/s; (c) 10/s; (d) 1/s

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### Emulsion Formation

	Evaporation (weight%)		Reference	ID
Visual stability	0	unstable	ESD	99
Visual stability	8	unstable	ESD	99
Visual stability	17	unstable	ESD	99
Visual stability	24	stable	ESD	99
Viscosity (mPa·s)	24	13660	ESD	99
Complex modulus (mPa)	24	340	ESD	99
Water content (wt %)	24	64	ESD	99

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### Chemical Dispersibility (volume %)

	Evaporation (weight %)		Reference ID	
Corexit 9500	0	24	ESD	99
Corexit 9500	8	17	ESD	00
Corexit 9500	17	15	ESD	00
Corexit 9500	24	17	ESD	00

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#### Hydrocarbon Groups (weight %)

	Evaporation (weight %)		Reference ID	
Saturates	0	66	ESD	98
Saturates	8	61	ESD	98
Saturates	17	62	ESD	98
Saturates	24	59	ESD	98
Aromatics	0	26	ESD	98
Aromatics	8	29	ESD	98
Aromatics	17	29	ESD	98
Aromatics	24	29	ESD	98
Resins	0	6	ESD	98
Resins	8	7	ESD	98
Resins	17	6	ESD	98
Resins	24	8	ESD	98
Asphaltenes	0	2	ESD	98
Asphaltenes	8	3	ESD	98
Asphaltenes	17	3	ESD	98
Asphaltenes	24	3	ESD	98

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#### Adhesion (g/m<sup>2</sup>)

Evaporation (weight %)			Reference ID	
0	16	SD = 2	ESD	98
8	39	SD = 2	ESD	98
17	38	SD = 5	ESD	98
24	53	SD = 4	ESD	98

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#### Volatile Organic Compounds (ppm)

	Evaporation (weight %)		Reference	ID
Benzene	0	598	ESD	98
Benzene	8	276	ESD	98
Benzene	17	0	ESD	98
Benzene	24	0	ESD	98
Toluene	0	2704	ESD	98
Toluene	8	1663	ESD	98
Toluene	17	9	ESD	98
Toluene	24	0	ESD	98
Ethylbenzene	0	993	ESD	98
Ethylbenzene	8	849	ESD	98
Ethylbenzene	17	69	ESD	98
Ethylbenzene	24	0	ESD	98
Xylenes	0	8073	ESD	98
Xylenes	8	7193	ESD	98
Xylenes	17	953	ESD	98
Xylenes	24	1	ESD	98
C3-benzenes	0	8503	ESD	98
C3-benzenes	8	9122	ESD	98
C3-benzenes	17	4561	ESD	98
C3-benzenes	24	30	ESD	98
Total BTEX	0	12367	ESD	98
Total BTEX	8	9981	ESD	98
Total BTEX	17	1032	ESD	98
Total BTEX	24	1	ESD	98
Total VOCs	0	20870	ESD	98
Total VOCs	8	19103	ESD	98
Total VOCs	17	5593	ESD	98
Total VOCs	24	31	ESD	98

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**Surface Tension (mN/m or dynes/cm)**

Temperature (°C)	Evaporation (weight %)		Reference	ID
0	0	28.8	ESD	98
0	8	34.3	ESD	98
0	17	DNF	ESD	98
0	24	DNF	ESD	98
15	0	27.7	ESD	98
15	8	29.1	ESD	98
15	17	30.1	ESD	98
15	24	31	ESD	98
25	0	24.8	ESD	98
25	8	28	ESD	98
25	17	29	ESD	98
25	24	29.5	ESD	98

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**Oil/Salt Water Interfacial Tension (mN/m or dynes/cm)**

Temperature (°C)	Evaporation (weight %)		Reference	ID
0	0	27.4	ESD	98
0	8	NM	ESD	98
0	17	DNF	ESD	98
0	24	DNF	ESD	98
15	0	23.6	ESD	98
15	8	26.5	ESD	98
15	17	26.1	ESD	98
15	24	21.1	ESD	98
25	0	23.2	ESD	98
25	8	26.3	ESD	98
25	17	24.2	ESD	98
25	24	18.6	ESD	98

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**Oil/Fresh Water Interfacial Tension (mN/m or dynes/cm)**

Temperature (°C)	Evaporation (weight %)		Reference ID	
0	0	28.6	ESD	98
0	8	NM	ESD	98
0	17	DNF	ESD	98
0	24	DNF	ESD	98
15	0	25.5	ESD	98
15	8	27.5	ESD	98
15	17	28.6	ESD	98
15	24	22.5	ESD	98
25	0	24.8	ESD	98
25	8	27.4	ESD	98
25	17	26.4	ESD	98
25	24	20.9	ESD	98

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#### Boiling Point Distribution (weight %)

Boiling Point (°C)	Evaporation (weight %)	Weight %	Reference ID	
40	0	1	ESD	99
100	8	1	ESD	99
160	17	1	ESD	99
200	24	1	ESD	99
60	0	2	ESD	99
120	8	3	ESD	99
180	17	3	ESD	99
250	24	8	ESD	99
80	0	3	ESD	99
140	8	5	ESD	99
200	17	6	ESD	99
300	24	22	ESD	99
100	0	5	ESD	99
160	8	8	ESD	99
250	17	16	ESD	99
350	24	37	ESD	99
120	0	8	ESD	99
180	8	11	ESD	99

300	17	29	ESD	99
400	24	51	ESD	99
140	0	11	ESD	99
200	8	14	ESD	99
350	17	43	ESD	99
450	24	64	ESD	99
160	0	13	ESD	99
250	8	24	ESD	99
400	17	55	ESD	99
500	24	75	ESD	99
180	0	16	ESD	99
300	8	36	ESD	99
450	17	67	ESD	99
550	24	83	ESD	99
200	0	19	ESD	99
350	8	48	ESD	99
500	17	77	ESD	99
600	24	90	ESD	99
250	0	29	ESD	99
400	8	60	ESD	99
550	17	85	ESD	99
650	24	95	ESD	99
300	0	40	ESD	99
450	8	70	ESD	99
600	17	91	ESD	99
700	24	98	ESD	99
350	0	51	ESD	99
500	8	79	ESD	99
650	17	95	ESD	99
400	0	62	ESD	99
550	8	86	ESD	99
700	17	98	ESD	99
450	0	72	ESD	99
600	8	92	ESD	99
500	0	81	ESD	99
650	8	96	ESD	99
550	0	87	ESD	99



700	8	98	ESD	99
600	0	92	ESD	99
650	0	96	ESD	99
700	0	98	ESD	99

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### Boiling Point Distribution (°C)

Weight %	Evaporation (weight %)	Boiling Point 'C	Reference ID	
5	0	100	ESD	99
5	8	138	ESD	99
5	17	194	ESD	99
5	24	234	ESD	99
10	0	137	ESD	99
10	8	174	ESD	99
10	17	222	ESD	99
10	24	257	ESD	99
15	0	171	ESD	99
15	8	206	ESD	99
15	17	245	ESD	99
15	24	276	ESD	99
20	0	205	ESD	99
20	8	232	ESD	99
20	17	265	ESD	99
20	24	294	ESD	99
25	0	232	ESD	99
25	8	254	ESD	99
25	17	285	ESD	99
25	24	311	ESD	99
30	0	256	ESD	99
30	8	276	ESD	99
30	17	303	ESD	99
30	24	328	ESD	99
35	0	279	ESD	99
35	8	298	ESD	99
35	17	322	ESD	99
35	24	345	ESD	99

40	0	301	ESD	99
40	8	316	ESD	99
40	17	341	ESD	99
40	24	362	ESD	99
45	0	323	ESD	99
45	8	338	ESD	99
45	17	360	ESD	99
45	24	380	ESD	99
50	0	345	ESD	99
50	8	359	ESD	99
50	17	379	ESD	99
50	24	399	ESD	99
55	0	367	ESD	99
55	8	380	ESD	99
55	17	400	ESD	99
55	24	416	ESD	99
60	0	391	ESD	99
60	8	402	ESD	99
60	17	419	ESD	99
60	24	435	ESD	99
65	0	415	ESD	99
65	8	424	ESD	99
65	17	440	ESD	99
65	24	455	ESD	99
70	0	439	ESD	99
70	8	448	ESD	99
70	17	464	ESD	99
70	24	477	ESD	99
75	0	467	ESD	99
75	8	475	ESD	99
75	17	489	ESD	99
75	24	501	ESD	99
80	0	497	ESD	99
80	8	504	ESD	99
80	17	517	ESD	99
80	24	529	ESD	99

85	0	533	ESD	99
85	8	539	ESD	99
85	17	551	ESD	99
85	24	562	ESD	99
90	0	579	ESD	99
90	8	584	ESD	99
90	17	593	ESD	99
90	24	601	ESD	99
95	0	639	ESD	99
95	8	642	ESD	99
95	17	649	ESD	99
95	24	655	ESD	99

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Viosca Knoll Block 990 **Origin:** Gulf of Mexico, USA

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**API Gravity**

		Reference ID	
38.1		ESD	98

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**Equation(s) for Predicting Evaporation**

- $\%Ev = (3.16 + 0.045T)\ln(t)$  Where %Ev = weight percent evaporated; T = surface temperature (°C); t = time (minutes)

		Reference ID	
		ESD	99

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**Sulphur (weight %)**

Evaporation (weight %)		Reference ID	
0	0.22	ESD	99
12	0.26	ESD	99
24	0.28	ESD	99
35	0.26	ESD	99

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**Water Content (weight %)**

Evaporation (weight %)		Reference ID	
0	0.2	ESD	98
12	<0.1	ESD	98
24	<0.1	ESD	98
35	<0.1	ESD	98

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**Flash Point (°C)**

Evaporation (weight %)		Reference ID	
0	-17	ESD	98
12	34	ESD	98
24	76	ESD	98
35	>95	ESD	98

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#### Density (g/mL)

Temperature (°C)	Evaporation (weight %)		Reference ID	
0	0	0.8461	ESD	98
0	12	0.8707	ESD	98
0	24	0.8875	ESD	98
0	35	0.9029	ESD	98
15	0	0.8337	ESD	98
15	12	0.8585	ESD	98
15	24	0.8752	ESD	98
15	35	0.8905	ESD	98
25	0	0.8272	ESD	98
25	12	0.8512	ESD	98
25	24	0.8678	ESD	98
25	35	0.8825	ESD	98

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#### Pour Point (°C)

Evaporation (weight %)		Reference ID	
0	-32	ESD	98
12	-7	ESD	98
24	-6	ESD	98
35	13	ESD	98

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#### Dynamic Viscosity (mPa s or cP)

Temperature (°C)	Evaporation (weight %)		Reference ID
0	0	12	ESD 98
0	12	31	ESD 98
0	24	218	ESD 98
0	35	663	• (a) ESD 98
15	0	7	ESD 98
15	12	12	ESD 98
15	24	31	ESD 98
15	35	91	ESD 98
25	0	5	ESD 98
25	12	8	ESD 98
25	24	19	ESD 98
25	35	47	ESD 98

- (a) slightly non-newtonian

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### Emulsion Formation

	Evaporation (weight%)		Reference ID
Visual stability	0	unstable	ESD 99
Visual stability	12	unstable	ESD 99
Visual stability	24	unstable	ESD 99
Visual stability	35	stable	ESD 99
Viscosity (mPa·s)	35	9339	ESD 99
Complex modulus (mPa)	35	96	ESD 99
Water content (wt %)	35	64	ESD 99

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### Chemical Dispersibility (volume %)

	Evaporation (weight %)		Reference ID	
Corexit 9500	0	41	ESD	99
Corexit 9500	12	29	ESD	00
Corexit 9500	24	22	ESD	00
Corexit 9500	35	14	ESD	00

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### Hydrocarbon Groups (weight %)

	Evaporation (weight %)		Reference ID	
Saturates	0	73	ESD	98
Saturates	12	69	ESD	98
Saturates	24	66	ESD	98
Saturates	35	62	ESD	98
Aromatics	0	22	ESD	98
Aromatics	12	25	ESD	98
Aromatics	24	26	ESD	98
Aromatics	35	28	ESD	98
Resins	0	4	ESD	98
Resins	12	6	ESD	98
Resins	24	6	ESD	98
Resins	35	8	ESD	98
Asphaltenes	0	1	ESD	98
Asphaltenes	12	1	ESD	98
Asphaltenes	24	1	ESD	98
Asphaltenes	35	2	ESD	98
Waxes	0	2.2	ESTD	02
Waxes	12	2.1	ESTD	02
Waxes	24	2.8	ESTD	02
Waxes	35	3.2	ESTD	02

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### Adhesion (g/m<sup>2</sup>)

Evaporation (weight %)	Reference ID			
0	13	SD = 1	ESD	98
12	21	SD = 1	ESD	98
24	20	SD = 2	ESD	98
35	26	SD = 4	ESD	98

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### Volatile Organic Compounds (ppm)

	Evaporation (weight %)	Reference ID		
Benzene	0	440	ESD	98
Benzene	12	214	ESD	98
Benzene	24	0	ESD	98
Benzene	35	0	ESD	98
Toluene	0	2268	ESD	98
Toluene	12	1293	ESD	98
Toluene	24	3	ESD	98
Toluene	35	0	ESD	98
Ethylbenzene	0	1197	ESD	98
Ethylbenzene	12	1081	ESD	98
Ethylbenzene	24	108	ESD	98
Ethylbenzene	35	0	ESD	98
Xylenes	0	9879	ESD	98
Xylenes	12	8952	ESD	98
Xylenes	24	1456	ESD	98
Xylenes	35	1	ESD	98
C3-benzenes	0	16437	ESD	98
C3-benzenes	12	14881	ESD	98
C3-benzenes	24	8187	ESD	98
C3-benzenes	35	22	ESD	98
Total BTEX	0	13785	ESD	98
Total BTEX	12	11540	ESD	98
Total BTEX	24	1568	ESD	98
Total BTEX	35	2	ESD	98
Total VOCs	0	30221	ESD	98
Total VOCs	12	26421	ESD	98
Total VOCs	24	9754	ESD	98



Total VOCs	24	24	ESD	98
Total VOCs	35	24	ESD	98

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#### Surface Tension (mN/m or dynes/cm)

Temperature (°C)	Evaporation (weight %)		Reference	ID
0	0	25.5	ESD	98
0	12	28.1	ESD	98
0	24	29.2	ESD	98
0	38	44.4	ESD	98
15	0	22.8	ESD	98
15	12	25	ESD	98
15	24	29.1	ESD	98
15	38	30.3	ESD	98
25	0	22.9	ESD	98
25	12	25.7	ESD	98
25	24	24.6	ESD	98
25	38	29	ESD	98

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#### Oil/Salt Water Interfacial Tension (mN/m or dynes/cm)

Temperature (°C)	Evaporation (weight %)		Reference	ID
0	0	18.2	ESD	98
0	12	22.9	ESD	98
0	24	22.5	ESD	98
0	38	NM	ESD	98
15	0	15	ESD	98
15	12	22.5	ESD	98
15	24	22.1	ESD	98
15	38	18.4	ESD	98
25	0	15.5	ESD	98
25	12	22.3	ESD	98
25	24	21.5	ESD	98
25	38	15.5	ESD	98

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#### Oil/Fresh Water Interfacial Tension (mN/m or dynes/cm)

Temperature (°C)	Evaporation (weight %)		Reference ID	
0	0	20.7	ESD	98
0	12	23.6	ESD	98
0	24	25.1	ESD	98
0	38	NM	ESD	98
15	0	15.1	ESD	98
15	12	22.7	ESD	98
15	24	22.6	ESD	98
15	38	18.4	ESD	98
25	0	15.6	ESD	98
25	12	22.6	ESD	98
25	24	22.4	ESD	98
25	38	17.8	ESD	98

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#### Boiling Point Distribution (BP vs weight %)

Boiling Point (°C)	Evaporation (weight %)	Weight %	Reference ID	
40	0	1.3	ESTD	02
60	0	2.2	ESTD	02
80	0	4.4	ESTD	02
80	12	0.3	ESTD	02
100	0	7.8	ESTD	02
100	12	1.7	ESTD	02
120	0	10.7	ESTD	02
120	12	3.7	ESTD	02
140	0	14.1	ESTD	02
140	12	6.6	ESTD	02
140	24	0.3	ESTD	02
160	0	18.1	ESTD	02
160	12	10.6	ESTD	02
160	24	1.5	ESTD	02
180	0	22.3	ESTD	02
180	12	15.1	ESTD	02
180	24	4.4	ESTD	02
200	0	26	ESTD	02

200	12	19.2	ESTD	02
200	24	8.1	ESTD	02
200	35	0.4	ESTD	02
250	0	35.9	ESTD	02
250	12	30.1	ESTD	02
250	24	20.2	ESTD	02
250	35	8.5	ESTD	02
300	0	26.6	ESTD	02
300	12	42	ESTD	02
300	24	33.9	ESTD	02
300	35	23.3	ESTD	02
350	0	57.2	ESTD	02
350	12	53.7	ESTD	02
350	24	47.4	ESTD	02
350	35	38.7	ESTD	02
400	0	66.3	ESTD	02
400	12	63.7	ESTD	02
400	24	58.9	ESTD	02
400	35	52	ESTD	02
450	0	74.5	ESTD	02
450	12	72.9	ESTD	02
450	24	69.4	ESTD	02
450	35	64	ESTD	02
500	0	81.2	ESTD	02
500	12	80.2	ESTD	02
500	24	77.8	ESTD	02
500	35	73.6	ESTD	02
550	0	86.5	ESTD	02
550	12	86.1	ESTD	02
550	24	84.4	ESTD	02
550	35	81.2	ESTD	02
600	0	90.7	ESTD	02
600	12	90.6	ESTD	02
600	24	89.5	ESTD	02
600	35	86.9	ESTD	02
650	0	93.9	ESTD	02
650	12	94.1	ESTD	02

650	24	93.2	ESTD	02
650	35	91.1	ESTD	02

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