

These are information for reference only and factory reserves the right to change or improve their products without prior notice. Clients should always contact Hostmost or Innospec for the latest information

Octamar HF10 Plus was put to this test during R&D below is the table FYR

TURBISCAN TEST (ASTM D7061-12) – ASPHALTENE STABILITY VLSFO TREATED WITH 67 PPM OCTAMAR™ HF-10 PLUS

Unadditised		50%					
		Fuel 1	Fuel 2	Fuel 3	Fuel 4	Fuel 5	Fuel 6
50%	Fuel 1	0.49	-	-	-	-	-
	Fuel 2	0.26	2.27	-	-	-	-
	Fuel 3	15.63	2.42	11.82	-	-	-
	Fuel 4	8.12	5.90	8.81	2.92	-	-
	Fuel 5	0.67	1.12	9.53	1.08	10.80	-
	Fuel 6	5.08	7.97	12.23	14.02	8.70	0.31

Additised		50%					
		Fuel 1	Fuel 2	Fuel 3	Fuel 4	Fuel 5	Fuel 6
50%	Fuel 1	/	-	-	-	-	-
	Fuel 2	/	/	-	-	-	-
	Fuel 3	0.47	/	0.86	-	-	-
	Fuel 4	1.68	0.22	0.50	/	-	-
	Fuel 5	/	/	0.40	/	2.41	-
	Fuel 6	0.29	0.27	0.20	0.23	0.72	/

Unadditised		90%					
		Fuel 1	Fuel 2	Fuel 3	Fuel 4	Fuel 5	Fuel 6
10%	Fuel 1	0.49	-	-	-	-	-
	Fuel 2	0.20	2.27	-	-	-	-
	Fuel 3	4.34	0.42	11.82	-	-	-
	Fuel 4	0.12	0.34	9.48	2.92	-	-
	Fuel 5	0.24	0.27	11.37	0.22	10.80	-
	Fuel 6	0.38	0.43	12.88	0.51	15.71	0.31

Additised		90%					
		Fuel 1	Fuel 2	Fuel 3	Fuel 4	Fuel 5	Fuel 6
10%	Fuel 1	/	-	-	-	-	-
	Fuel 2	/	/	-	-	-	-
	Fuel 3	0.34	/	0.86	-	-	-
	Fuel 4	/	/	0.71	/	-	-
	Fuel 5	/	/	0.45	/	2.41	-
	Fuel 6	/	/	0.92	/	0.92	/

Unadditised		10%					
		Fuel 1	Fuel 2	Fuel 3	Fuel 4	Fuel 5	Fuel 6
90%	Fuel 1	0.49	-	-	-	-	-
	Fuel 2	0.32	2.27	-	-	-	-
	Fuel 3	10.83	12.13	11.82	-	-	-
	Fuel 4	0.13	0.19	0.43	2.92	-	-
	Fuel 5	9.66	9.81	9.16	8.78	10.80	-
	Fuel 6	5.25	3.02	4.15	5.60	4.96	0.31

Additised		10%					
		Fuel 1	Fuel 2	Fuel 3	Fuel 4	Fuel 5	Fuel 6
90%	Fuel 1	/	-	-	-	-	-
	Fuel 2	/	/	-	-	-	-
	Fuel 3	0.14	0.12	0.86	-	-	-
	Fuel 4	/	/	/	/	-	-
	Fuel 5	1.53	1.04	1.45	1.18	2.41	-
	Fuel 6	0.45	0.56	0.4	0.32	0.63	/

For best asphaltene stability results treat rate: 1:10,000 – 1:15,000




Table on left indicates the fuel mixing at various ratios (10-90, 50-50 & 90-10) and not treated with chemicals. Those mixing with RSN result indicated in Red (over 5) is bad or unstable.

Same is than treated with HF10 Plus and the results are on the right table.

Despite have such result, we still recommend to only mix fuels if really unavoidable except unpumpable remaining in tanks. If done should follow guide above and use Octamar HF 10 Plus to avoid compatibility issues.

Similar guide Shell STMA have provided below

Stability and compatibility to become a challenge for new 0.5% fuels

compatible

stable

Incompatible

- Stability refers to the ability of a single stream to stabilize asphaltenes in the matrix over time
- Compatibility refers to the ability of two separate stable streams to give a stable blend after mixing
- Asphaltenes are generally stable in aromatic streams and unstable in paraffinic streams
- Increased amount of LS paraffinic streams in 2020 may lead to more incompatibility issues
- Incompatibility may be managed either by smart blending or by use of asphaltenes dispersants (for borderline blends)

Source: Shell STMA

