



Eni Clematis MS, classified as MES (Mild Extraction Solvate), is an aromatic safe not carcinogenic oil, produced by a heavy paraffinic fraction with an aromatic level well exceeding those of standard paraffinic oils.

Eni Clematis MS is used as extender oil in the production of rubbers and in the manufacturing of tyres and other rubber goods.

PROPERTIES

Properties	Unit of Measure	Values		Typical	Method
		Min	Max		
Density at 15°C	kg/m ³	895	925		ASTM D 1298
Viscosity at 40°C	mm ² /s			160	ASTM D 445
Viscosity at 100°C	mm ² /s	13	17		ASTM D 445
Flash point	°C	220			ASTM D 92
Pour point	°C		-6		ASTM D 97
VGC	-	0.825	0.865		ASTM D 2501
Glass transition temperature DSC	°C			- 61	ASTM E 1356
Ca/Cn/Cp	% m/m			10/23/67	ASTM D 3238
Ca/Cn/Cp VGC ASTM D2501 (calc. with viscosity at 100°C)	% m/m			8/25/67	ASTM D 2140
Ca/Cn/Cp VGC ASTM D2501 (calc. with viscosity at 100°C no sulphur)	% m/m			10/33/57	ASTM D 2140
Refractive index at 20 °C	-	1.495	1.505		ASTM D 1747
Clay gel	% m/m				ASTM D 2007
Saturated	-			75	
Polars	-			3	
Aromatics	-			22	
Asphaltenes	-		--		
Sulphur	% m/m		2		ASTM D 4294 ASTM D 2622





Properties	Unit of Measure	Min	Max	Typical	Method
Water content	% m/m		0.1		ASTM D 6304
DMSO extract	% m/m		2.9		IP 346
Distillation at 760 mmHg	-				ASTM D 1160
5% volume	°C			435	
10% volume	°C			455	
20% vol.	°C			475	
50% volume	°C			510	
Polycyclic Aromatic Hydrocarbons	-				EN 16143
-Benzo(a)pirene(BaP)	mg/kg		<1		EN 16143
Sum of	-				EN 16143
-Benzo(e)pirene(BeP)	-				EN 16143
-Crisene (CHR)	-				EN 16143
-Benzo(b)fluorantene(BbFA)	-		<10		EN 16143
-Benzo(j)fluorantene(BjFA)	-				EN 16143
-Benzo(k)fluorantene(BkFA)	-				EN 16143
Dibenzo(a,h)anthracene(DBA hA)	-				EN 16143

(1) Legal limits – Reg. (CE)1907/2006 (REACH), Annex XVII, Point 50 regarding the extender oils used for the production of tyres or part of tyres. It does not apply to other uses.



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