



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.

PROPERTIES

Properties	Unit	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 D97 ASTM D6892 ASTM D7346 ISO3016
Viscosity Gravity Constant (VGC)	-	0.825	0.865		ASTM D 2501
Glass transition temperature DSC	°C			- 61	ASTM E 1356 ISO 28343
Ca/Cn/Cp (calculated with VCG ASTM D2501 at 100°C)	% m/m			8/25/67	ASTM D 2140
Ca/Cn/Cp (calculated with VCG ASTM D2501 at 100°C no sulfur correction)	% m/m			10/33/57	ASTM D 2140
Refractive index at 20°C	-	1.495	1.505		ASTM D 1747
Class of hydrocarbons by Clay gel chromatography	% m/m				ASTM D 2007
Saturates	-			75	
Polars	-			3	
Aromatics	-			22	
Asphaltenes	-		--		
Sulphur	% m/m		2		ASTM D 4294 ASTM D 2622
Water content	% m/m		0.1		ASTM D95 ASTM D6304





Properties	Unit	Min	Max	Typical	Method
DMSO extract	% m/m		2.9		IP 346
Distillation at 760 mmHg	-				EN 15199-2
5% volume	°C			435	
10% volume	°C			455	
20% volume	°C			475	
50% volume	°C			510	
Polycyclic Aromatic Hydrocarbons	-				EN 16143
- Benzo(a)pyrene (BaP)	mg/kg		<1		
Total sum of the following PAHs:	mg/kg		<10		
- Benzo(a)pyrene (BaP)	-				
- Benzo(e)pyrene (BeP)	-				
- Benzo(a)anthracene (BaA)	-				
- Chrysene (CHR)	-				
- Benzo(b)fluoranthene (BbFA)	-				
- Benzo(j)fluoranthene (BjFA)	-				
- Benzo(k)fluoranthene (BkFA)	-				
Dibenzo(a,h)anthracene (DBA hA)	-				

(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.

APPLICATIONS

- **Eni Clematis MS** is used as extender oil in the production of rubbers and in the manufacturing of tyres and other rubber goods. Thanks to its chemical and physical characteristics, the product provides ductility to highly brittle materials in which is present.

