

Denatured Eni Clematis MS



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

Denatured Eni Clematis MS has a high performance coming from excellent chemical-physical characteristics in terms of high stability, low volatility, excellent plastic behavior, adequate viscosity and remarkable chemical compatibility both with rubber and rubber blend.

PROPERTIES

Properties	Unit	Values		Typical	Method
		Min	Max		
Appearance	-			blue liquid	Visual
Density at 15°C	kg/m ³	905	925		ASTM D 1298
Viscosity at 40°C	mm ² /s			170	ASTM D 445
Viscosity at 100°C	mm ² /s	13	17		ASTM D 445
Flash point COC	°C	240			ASTM D 92
Flash point PM	°C	230			ASTM D 93
Pour point	°C		-9		ASTM D 97 ASTM D 6892 ASTM D 7346 ISO 3016
Viscosity Gravity Constant (VGC)	-	0.825	0.865		ASTM D 2501
Glass transition temperature DSC	°C			-61	ASTM E 1356 ISO 28343
Aniline point	°C			98	ASTM D 611
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 1218
Class of hydrocarbons by Clay gel chromatography:	% m/m				ASTM D 2007
- Saturates	% m/m			55	



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Properties	Unit	Min	Max	Typical	Method
- Polars	% m/m			3	
- Aromatics	% m/m			42	
- Asphaltenes	% m/m			Nil	
Sulphur	% m/m		2		ASTM D 4294 ASTM D 2622
Water content	% m/m		0.1		ASTM D 95 ASTM D 6304
DMSO extract	% m/m		2.9		IP 346
Distillation at 760 mmHg:	°C				EN 15199-2
- 5% volume	°C			435	
- 10% volume	°C			455	
- 20% volume	°C			475	
- 50% volume	°C			510	
Polycyclic Aromatic Hydrocarbons	mg/kg				EN 16143
- Benzo(a)pyrene (BaP)	-		<1		
Total sum of the following PAHs:	-		<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 (DBAhA)	-				

(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

- **Denatured 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.

