

**SC VIROMET SA**

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Chemical formula : - CAS No # : 67784-80-9 EINECS No : 267-055-2	MATERIAL DATA SHEET ESTERVI Biofuels for Diesel engines	Code PS-MI-F06/9 ; pag. 1/1
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		Drawn up :S.TH-P ;S. CTC

General, Use

ESTERVI is a blend of fatty acid methyl esters which is produced from vegetable oils. The product is used as fuel for Diesel engines in its pure form (for changed engines) or blended with diesel fuels (for unchanged engines , 20 % EsterVI and 80 % diesel fuel).

Quality Requirements

NO	Characteristic name	Unit of measure	Limits		Analysis methods
			minimum	maximum	
LOT TESTING					
1.	Appearance	-	Clear liquid without suspensions		Visual
2.	Colour	-	Straw yellow to reddish yellow		Visual
3.	Density at 15° C,	kg / m ³	0,860	0,900	SR EN ISO 3675-2003
4.	Kinematic viscosity, at 40°C	mm ² / s	3,5	5,0	SR ISO 3104:1996
5.	Water content	mg / k g	-	500	SR ISO 760:1994
6.	Acid number	mg KOH / g	-	0,5	SR EN 14104-2003
7.	Methanol content	%	-	0,2	ST 1-2004
8.	Iodine number	g iodine /100g	-	120	SR EN 14111-2003
9	Sulfated ash	%	-	0,02	SR ISO 3987 :1998
10.	Free glycerol	%	-	0,02	ST 1-2004
11.	Total glycerol,	%	-	0,25	ST 1-2004
PERIODICAL TESTING					
12.	Flash point	°C	120	-	SR EN ISO 3679
13.	Sulphur content	mg /kg	-	10	SR EN ISO 20846 SR EN ISO 20884
14.	Coke number (at distillation residue of 10%)	%	-	0,3	SR ISO 10370
15.	Cetane number	-	51	-	SR EN 5165
16.	Total contamination	mg / kg	-	24	SR EN 12662
17.	Copper corrosion (3 hours at 50° C)	Nominal	class 1		SR ISO 2160
18.	Oxidation stability ,110°C	ore	6	-	SR EN 14112
19.	Metals group I (Na + K)	mg / kg	-	5	SR EN 14108
	Metals group II (Ca + Mg)			5	SR EN 14109
20.	Phosphorus content	mg / kg	-	10	SR EN 14107

STAS, SR – Romanian standards

ST-Technical specification

Packing, Storage, Transportation

The product is stored in tanks at temperatures ranging between 10 -50 °C away from sunrays, oxidizing and reducing agents, overheat and flammable sources The product is delivered in railway tanks, in metal or polyethylene packaging equipped with seals attachment systems.

RID/ADR : No restraints**Safety Measures**

The handling of this product must be done only by trained personnel that are equipped with proper protective equipment.

Warranty

The product has a warranty period of 6 months from the production date, provided that the above-mentioned packing, storage and transportation provisions are complied with.