



FUTURE PRELUDE SDN. BHD. (713598-K)

No. 11, Jalan Sungai Pinang 5/17, KS1, Taman Perindustrian Pulau Indah,
42920 Pelabuhan Klang, Selangor Darul Ehsan, Malaysia.

Tel +60 3 3326 7333
Fax +60 3 3326 7222

SPECIFICATION

PALM METHYL ESTER – EN 14214

TEST PARAMETER	UNIT	SPECIFICATION	ANALYSIS METHOD
ESTER CONTENT	%	96.5 MIN	EN 14103
DENSITY AT 15 DEG C	Kg/m ³ Kg/l ⁻¹	860 - 900 0.86 - 0.9	EN ISO 3675 EN ISO 12185
KINEMATIC VISCOSITY AT 40 DEG C	mm ² /sec	3.50 - 5.00 MAX	EN ISO 3104
FLASH POINT	Deg C	120 MIN	EN ISO 3679
COLD FILTER PLUGGING POINT	Deg C	TYP 12	EN 116
SULFUR CONTENT	mg/kg % mass	10 MAX 0.001 MAX	EN 20846 EN 20884
CARBON RESIDUE (ON 10% DISTILLATION RESIDUE)	% (m/m)	0.30 MAX	EN ISO 10370
CETANE - NUMBER	-	51.0 MIN	EN ISO 5165
SULFATED ASH CONTENT	% (m/m)	0.02 MAX	EN ISO 3987
WATER CONTENT	mg/kg % mass	500 MAX 0.05 MAX	EN ISO 12937
TOTAL CONTAMINATION	mg/kg	24 MAX	EN 12662
COPPER STRIP CORROSION (3H AT 50 DEG C)	Rating	Class 1	EN ISO 2160
OXIDATION STABILITY, 110DEG C	Hrs	6.0 MIN	EN 14112
ACID VALUE	mg KOH/g	0.50 MAX	EN 14104
IODINE VALUE	g I/100g	120 MAX	EN 14111
LINOLEIC ACID METHYLESTER CONTENT	% (m/m)	12.0 MAX	EN 14103
POLYUNSATURATED(≥ 4 DOUBLE BONDS) METHYL ESTERS	% (m/m)	1 MAX	-
METHANOL CONTENT	% (m/m)	0.20 MAX	EN 14110
MONOGLYCERIDES CONTENT	% (m/m)	0.80 MAX	EN 14105
DIGLYCERIDES CONTENT	% (m/m)	0.20 MAX	EN 14110
TRIGLYCERIDES CONTENT	% (m/m)	0.20 MAX	EN 14105
CONTENT OF FREE GLYCEROL	% (m/m)	0.02 MAX	EN 14105
CONTENT OF TOTAL GLYCEROL	% (m/m)	0.25 MAX	EN 14105
CONTENT OF ALKALI (Na + K)	mg/kg	5.0 MAX	EN 14108
CONTENT OF METAL (Ca + Mg)	mg/kg	5.0 MAX	EN 14109 EN 14538
PHOSPHOROUS CONTENT	mg/kg	10.0 MAX	EN 14107