

## BIO-DIES OIL QUALITY STANDARD (BD100)

- FOR USE : Raw material oil for BD20 production -

ITEM	DIVISION	QUALITY STANDARD	TEST METHOD
Fatty acid methyl ester content (weight %)		96.5 ↑	KS M 2413, Pr EN 14103
Flash point (°C)		120 ↑	KS M ISO 2719
Kinematic Viscosity (40°C, mm <sup>2</sup> /s)		1.9 ↑ ~ 5.0 ↓	KS M 2014
Residual carbon content (weight %)		0.1 ↓	KS M ISO 10370
Sulfur (mg/kg)		10 ↓	KS M 2027
Ash (weight %)		0.01 ↓	KS M ISO 6245
Copper plate corrosion (50°C, 3h)		1 ↓	KS M 2018
Filter clogging point (°C)		0 ↓	KS M 2411
Density (15°C, kg/m <sup>3</sup> )		860 ↑ ~ 900 ↓	KS M 2002
Moisture (% by weight)		0.05 ↓	KS M ISO 12937
Solid impurities (mg/kg)		24 ↓	EN 12662
Total acid value (mg KOH/g)		0.50 ↓	KS M ISO 6618
Total glycerol (% by weight)		0.24 ↓	KS M 2412
Monoglyceride (% by weight)		0.80 ↓	KS M 2412
Diglycerides (% by weight)		0.20 ↓	KS M 2412
Triglycerides (% by weight)		0.20 ↓	KS M 2412
Free glycerol (% by weight)		0.02 ↓	KS M 2412
Oxidation stability (110°C, h)		6 ↑	EN 14112
Methanol (% by weight)		0.2 ↓	EN 14110
alkali (mg/kg)	(Na + K)	5 ↓	EN 14108, 14109
	(Ca + Mg)	5 ↓	EN 14538
Phosphorus (mg/kg)		10 ↓	EN 14107

1. The filter clogging point is applied during the cold season (from November 15th to February 28th of the following year).
2. KS M 2413 test method is applied to biodiesel manufactured from vegetable raw materials.