

ISL OptiPMD: Unique physical distillation for fast and reliable analysis

- One button operation
- High throughput for optimal lab productivity and workflow
- Ideal for mobile and on-site applications



Keywords: OptiPMD, Specifications, Specs

Introduction:

Developed as the next generation of the ISL PMD 110, the OptiPMD improves on the existing state-of-art lab solution for fast and reliable response distillation analysis according to ASTM D7345 and EN17306 standard test methods. Based on the micro-distillation method, the OptiPMD determines in less than 10min, using only 10ml of sample, the boiling range of various petroleum products, light/middle distillates in perfect correlation with ASTM D86 (groups 0-4) and biodiesels B100 in perfect correlation to ASTM D1160 with only 5 ml.

As an alternative to D86, D7345 is meanwhile listed in the following international standards and can be used for fuel certification.

ASTM specifications:

Specification	Description
D396	Standard Specification for Fuel Oils
D975	Standard Specification for Diesel Fuel Oils
D1655	Standard Specification for Aviation Turbine Fuels
D2880	Standard Specification for Gas Turbine Fuel Oils
D3699	Standard Specification for Kerosene
D4814	Standard Specification for Automotive Spark-Ignition Engine Fuel
D6751	Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels
D7467	Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20)
D7566	Standard Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons
D8147	Standard Specification for Special-Purpose Test Fuels for Aviation Compression-Ignition Engines

EN specifications:

Specification	Description
EN 590-2022	Diesel B7
EN 16734-2022	Diesel B10

International Specifications:

Country	Specification	Description
Canada	CGSB-3.5-2016	Automotive Gasoline
	CGSB-3.511-2016	Oxygenated automotive gasoline containing ethanol (E1–E10)
	CGSB-3.517-2017	Diesel Fuel
	CGSB-3.520-2017	Diesel fuel containing low levels of biodiesel (B1-B5)
	CGSB-3.522-2017	Diesel Fuel containing Biodiesel (B6-B20)
	CGSB-3.2-2017	Heating Fuel Oil
Mexico	NOM-016-CRE-2016	Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels
Chile	Dto-60-2012	Especificaciones de calidad de los petrolíferos
UK & EU	Def Stan 91-91 issue 10	Turbine Fuel, Kerosene Type, Jet A-1
India	IS 1460:2017	Automotive Diesel Fuel
	IS 1571:2018	Aviation Turbine Fuels, Kerosene Type, Jet A1

Conclusion

The ISL OptiPMD is an excellent combination between speed and good correlation to ASTM D86 or EN/ISO 3405. For the user this means a much higher sample throughput and a faster response to their specific analysis requests.