



Test Monitoring Center

@ Carnegie Mellon University
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<http://astmtmc.cmu.edu>
412-365-1000

CERTIFICATE OF ANALYSIS

TMC Product ID: SF105C
Product Purpose: Service Liquid 105 (reblend C) for ASTM D471
Product Description: Fully Formulated Engine Oil
SAE J300 Viscosity Grade: 5W-30
TMC Batch Number: 102600
Certificate Issue Date: 2016-03-01

Measured Characteristics

ASTM D93 Flashpoint, °C	192.5
ASTM D4052 Digital Density @ 15°C, g/ml	0.8710
ASTM D445 Kinematic Viscosity @ 40°C, mm ² /s	59.06
ASTM D445 Kinematic Viscosity @ 100°C, mm ² /s	10.10
ASTM D2501 Viscosity-Gravity Constant (calculated)	0.805
ASTM D4683 HTHS Apparent Viscosity @ 150°C, mPa-s	3.25
ASTM D4684 Borderline Pumping Temperature Test	
Apparent Viscosity @ -35°C, mPa-s	52,100
Yield Stress, Pa	<35
ASTM D611 Aniline Point, °C	99.3
ASTM D2140 Carbon Type	
Carbon Aromatics, %	0
Carbon Naphthenic, %	36
Carbon Paraffins, %	64

Store at ambient temperature not exceeding 10 – 40°C (50 - 104°F). Do not refrigerate.

Certificate approved 2016-03-01 by:

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