



# TECHNICAL DATA SHEET

## SYNTHESIS AUTO 5W-40

Synthesis Auto 5W-40 is an ultra-high performance fully synthetic engine oil designed to meet a wide range of European OEM specifications.

This product is suitable for fuel-injected petrol engines, including those fitted with exhaust gas recirculation (EGR) and Three-Way Catalysts (TWC). It is also suitable for turbocharged and intercooled direct injection diesel engines that are not equipped with DPF (Diesel Particulate Filter) or GPF (Gasoline Particulate Filter).

### FEATURES

- Outstanding oxidation stability allows drain intervals to be significantly extended
- Low volatility, which leads to reduced oil consumption
- Excellent control of engine deposits and blow-by contamination
- Superb wear protection
- Significant performance 'reserve' over quoted specifications to effectively combat extreme operating conditions

### PERFORMANCE SPECIFICATIONS, APPROVALS & RECOMMENDATIONS:

API	SN/CF
MB	229.5
ACEA	A3/B4
VW	502.00 / 505.00
PORSCHE	A40
OPEL	GM-LL-B-025
PEUGEOT / CITROEN	PSA B71 2296
RENAULT	RN 0700 / 0710

### TYPICAL PHYSICAL CHARACTERISTICS

Characteristic	Method	UoM	Typical
SAE Viscosity	J300	-	5W-40
Density @ 15°C	ASTM D4052	g/cm <sup>3</sup>	0.8527
Kinematic Viscosity @ 40°C	ASTM D445	mm <sup>2</sup> /s	77.90
Kinematic Viscosity @ 100°C	ASTM D445	mm <sup>2</sup> /s	13.30
Viscosity Index	ASTM D2270	-	174
CCS Viscosity (@ 30°C)	ASTM D5293	mPa.s	5840
HT/HS Viscosity @ 150°C	ASTM D5481	mPa.s	3.8
Total Base Number (TBN)	ASTM D2896	mgKOH/g	10.1
Flash Point (COC)	ASTM D92	°C	232
Pour Point	ASTM D97	°C	-42°C
NOACK Volatility @ 250°C	ASTM D5800B	% mass	9.9
KO Shear Stability (30 cycles):			
After Shear Viscosity @100°C	ASTM D6278	mm <sup>2</sup> /s	12.9

Details continue on next page.



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Shear Stability Index (SSI)	ASTM D6278	%	3.0
Foaming Tendency:			
Seq. I/II/III (24°C/93.5°C/24°C)	ASTM D892	mL	0-0/0-0/0-0
Sulphated Ash	ASTM D874	% mass	1.1
Phosphorus Content	ASTM D6443	% mass	0.1
Sulphur Content	ASTM D6443	% mass	0.25
Appearance	ASTM D4176-1	-	Clear & Bright
Colour	Visual	-	Amber
Product Code	-	-	03340

This data sheet and the information it contains is believed to be accurate as of the date of creation. Please email [technical@rockoil.co.uk](mailto:technical@rockoil.co.uk) or telephone +44 (0) 1925 636191 if you require any further information.