



## Certificate of Analysis

**Customer:** Ravenol Polska Spolka z o.o.  
Ul. Chojnicka 61  
83-200 Starogard Gdański  
Poland

**Product:** RAVENOL VMP SAE 5W-30

**Article Number:** 1111122

**Customs Tariff Number:** 34039900

**Batch No.:** 18101509  
**Production Date:** 16.10.2018  
**Shelflife:** 3 years

### Test Values:

Characteristics	unit	Typical	Result	test according to	
<b>Appearance</b>		Clear and bright	pass	visual	
<b>*Colour</b>		<3,5	L3.5	DIN ISO 2049(2001-06)	
<b>*Density</b>	at 15 °C	kg/m³	840 – 860	855,2	EN ISO 12185(1997-11)
<b>*Viscosity</b>	at –30°C	mPa.s	<6600	4758	ASTM D5293-17a
<b>*Viscosity</b>	at 40 °C	mm²/s	50 – 90	72,36	DIN 51 562-1(1999-01)
<b>*Viscosity</b>	at 100 °C	mm²/s	9,3-<12,5	11,95	DIN 51 562-1(1999-01)
<b>*Viscosity index</b>			>120	162	DIN ISO 2909(2004-08)
<b>*Pourpoint</b>		°C	<-33	-57	DIN ISO 3016(2017-11)
<b>Flashpoint</b>	COC	°C	>200	238	DIN ISO 2592(2018-01)
<b>*Volatility</b>		%	< 18	8,0	ASTM D5800/b-15
<b>*Base number (BN)</b>	mg KOH/g		> 3	6,4	ASTM D2896-15

\*Laboratory accredited acc. to DIN EN ISO/IEC 17025:2005 (D-PL-18751-01-00)

This document has been verified by an expert.  
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