

Renault RN720 certificate

Identification	Supplier	Wolf Oil Corporation N.V.
	Formula name	WOLF OFFICIALTECH 5W30 C4
	ACEA	C4-16
	1.01 Grade	5W-30

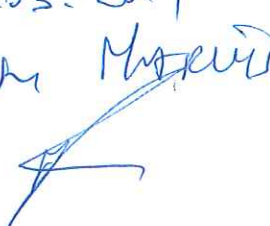
Lab performance	1.02	Shear stability	11.71
	1.03	HTHS (150°C)	3.5
	1.04	HTHS (100°C)	7.55
	1.05	Kinematic viscosity 40°C	67.93
		Kinematic viscosity 100°C	11.95
	1.06	Noack	10.4
	1.07	Calcium	1070
		Zinc	810
		Magnesium	<10
		Sulphur	0.2
		Phosphorus	710
		Chlorine	<5
		Molybdenum	<1
		Barium	<10
		Silicon	<1
	Boron	4	
	1.08	Sulphated Ash	0.45
	1.09	TAN	1.7
	1.10	TBN	6.5
	1.11	RE6 - FKM	PASS
RE7 - ACM		PASS	
RE8 - HNBR		PASS	
RE9 - AEM		PASS	
1.12	Foaming Seq1	0/0	
	Foaming Seq2	0/0	
	Foaming Seq3	0/0	
1.13	Foaming Seq4	30/0	
1.14	Low temperature Cranking viscosity (CCS)	6010@-30°C	
1.15	Low temperature Pumping viscosity (MRV)	28900@-35°C	

Lab performance (continued)	1.16	Density	850.2
	1.17	Open-vessel flash point	237
	1.18	Pour point	-39
	1.19	Copper corrosion	1b
	1.20	Anti-wear properties	0,48
	1.21	De-airing	15.9
	1.22	Water content, %	<0.04
	1.23	Water conten, ppm	284
	1.24	Base oil type & ratio	Gr.3 100%
	1.25	TOC	Classe 3
	1.26	MCT	8.0 / 258°C
	1.27	Oil oxidation with Biodiesel	PASS
	1.28	Low temperature Pumping viscosity	27600@-35
	ACEA Engine tests performance	2.01	EP6CDT cleanliness test
2.02		Seq VG low temperature sludge	PASS
2.03		M271 black sludge	PASS
2.04		M111 fuel economy	2.1
2.05		DV6C dispersivity	PASS
2.06		OM646LA Wear, Viscosity stability & oil consumption	PASS
2.07		VW TDI piston cleanliness & ring sticking	PASS
2.08		OM646LA Biodiesel Effects	PASS

LLR	2.09	Renault LLR	PASS
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Renault Registration Data (to be filled by Renault's delegate only)		
Registration	Final Technical data (dd/mm/yyyy)	28.01.2019
	Sample delivery (dd/mm/yyyy)	31.01.2019
Certificate	Certificate serial number	RN720-19-09
	Delivered on (dd/mm/yyyy)	14.03.2019
	Valid till (dd/mm/yyyy)	14.03.2023
	Letter reference	KCM7300-2019-18512

Renault: Date, Name, Signature

19.03.2019
 René Meyer


Supplier commitment: Date, Name, Signature

I hereby certify that all data submitted in this form is correct and issues from Renault-approved independent or Renault-certified (self-agreement process) testing facilities.

22/03/2019
 Kathleen Adriaessens
