

UNIOIL Engine Oil SAE 20W50 API SM/CF

High Performance Engine Oil

April 2012

Properties

UNIOIL Engine Oil SAE 20W50 API SM/CF, is multi grade oil for gasoline engines. Formulated from high quality virgin base oil and number of additive carefully selected for engine protection & performance.

Features and Benifits

- Detergent /dispersant properties to keep engine part clean and particular prevent black SM/CF Fudge formation and the build up particles.
- Thermal and oxidation stability
- · offers high-temperature safety reduces fuel and oil consumption, thus lower environmental loads

Approvals / Recommendations

- has a very good dirt carrying capacity
- prevents SM/C Fudge development
- · extends the engine's service life
- allows longer oil drain intervals
- Maximum power out put
- Reduce Maintained cost

Application

- Recommend for petrol engines
- · Suitable for high temperature

Performance / Specifications

SAE Grade 20W50 ACEA 2002: A2/B2

API SM/CF Volkswagen

!

Typical Data	Unit	Test Method	Results
SAE Grade			20W-50
Density at 15!C	g/cm³	ASTM D4052	0.885
Viscosity at -25!C	mPa s	ASTM D5293!	7200
Viscosity at 40!C	mm²/s	ASTM D445!	178,8
Viscosity at 100!C	mm²/s	ASTM D445!	19,5
Viscosity Index	-	ASTM D2270!	125
Flash Point	°C	ASTM D92!	230
Pour Point	°C	ASTM D97!	- 24
Total Base Number	Mg KOH/g	ASTM D2896!	8

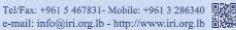
!



Report

Date: 16/05/2014 No: 5227/100/257078/2014 IRI Bldg. - Lebanese University Campus Hadath (Baabda) - Lebanon

P.O. Box: 11-2806 Beirut





Name:

EN

MESSRS SLIMCO TRADING CO. KFARCHIMA- LEBANON

Reference:

Your fax dated 06/05/2014

SAMPL

Received as:

"Mineral Oil "*

(in a plastic bottle)

Received on:

08/05/2014

Results

Testing duration: From 08/05/2014 to 16/05/2014 Unless otherwise specified, the sampling was done by the client.

CHEMICAL ANALYSIS & PHYSICAL TESTING

IRI			Reference Method	
Code No:				
428 – 1	Kinematic viscosity at 40 °C	168.1 cSt	ASTM D445	
428 - 2	Kinematic viscosity at 100 °C	19.7 eSt	ASTM D445	
	Viscosity Index	135	ASTM D2270	
149 – 1	Flash point, COC	224 °C	ASTM D92	

*Sample your reference:

Bottle received well sealed

Unioil Super Heavy Duty SM/CF 20W50

Results relate only to the sample tested

MZ/MC/rm

1/1

Dr. joseph Matta

Division Head Laboratories

Nadia Khoury

Applied Research & Testing Director

CONDITIONS & TERMS:

THE INDUSTRIAL RESEARCH INSTITUTE UNDERTAKES NO RESPONSIBILITY FOR THE AUTHENTICITY OF THE SAMPLE FROM WHICH THE SPECIMENS TESTED SUBJECT OF THIS REPORT ARE TAKEN UNLESS SAMPLING IS CONDUCTED BY THE INSTITUTE ITSELF WHICH FACT WHEN APPLICABLE WILL BE CLEARLY INDICATED AS PART OF THE REPORT. THE INFORMATION GIVEN IN THIS REPORT DELIVERED IN A SEALED ENVELOPE IS FOR THE USE OF THE CLIENT AND IS NOT TO BE ABSTRACTED OR PUBLISHED BY ANY MEANS OR IN ANY FORM IN WHOLE OR IN PART WITHOUT THE PRIOR WHITTEN CONSENT OF THE INDUSTRIAL RESEARCH INSTITUTE. IT MAY BE PHOTOCOPIED STRICTLY FOR THE INTERNAL USE OF THE CLIENT. NO RESPONSIBILITY FOR ANY INTERPRETATION OF THIS REPORT IS ASSUMED EXCEPT WHEN THE INTERPRETATION IS GIVEN IN WRITING BY THE INDUSTRIAL RESEARCH INSTITUTE. UNDERTAKES

ESTING INSPECTION OR CALIBRATION OF MATERIALS INSTRUMENTS AND OTHER ARTICLES IS ONLY UNDERTAKEN BY THE INDUSTRIAL RESEARCH INSTITUTE SUBJECT TO THE EXPRESS STIPULATION THAT NO RESPONSIBLITY OF ANY KIND OR HOWSOEVER ARISING SHALL ATTACH TO THE INDUSTRIAL RESEARCH INSTITUTE OR TO ITS EMPLOYEES IN RESPECT TO ANY LOSS INJURY OR DAMAGE ARISING DIRECTLY OR INDIRECTLY OF OR IN CONNECTION WITH ANY SUCH TESTING INSPECTION OR CALIBRATION OR ANY FAILURE OR OMMISSION IN REGARD THEREOF