

21 March 2017

Ms. Yvonne Koay
Lubrizol Southeast Asia (Pte) Ltd
44 Tanjong Penjuru
SINGAPORE 609032

Dear Ms. Yvonne Koay,

Thank you for your co-operation about the new application on behalf of BARDAHL DE MEXICO S.A. DE C.V.

We are enclosing the "Notification and Written Consent" about your document as follows.

M052BSB005 BARDAHL MOTOS 4T

We are going to publicize the information about this on-filed product from April 2017.

We would like you to check the following information.

If you find any flaws, please let us know.

①Oil Code	M052BSB005
②Brand Name	BARDAHL MOTOS 4T
③Submitter Name	BARDAHL DE MEXICO S.A. DE C.V.
④Viscosity Grade	10W-40
⑤Performance classifications	MA2

If you have any questions, please feel free to contact us.


Best regards,



Shigenori Hidan (Mr.)
Business Dept.

Appendix 1

**FILING NOTIFICATION BASED ON MOTORCYCLES-FOUR-STROKE CYCLE
GASOLINE ENGINE OILS
(JASO T 903:2016)**

Date of submission of Documents		27/Day Feb /Month 2017 /Year	
Submitter	BARDAHL DE MEXICO S.A. DE C.V.	Contact Person	Juan Alberto Guzman Vazquez
Name of Person Responsible for Documentation	Juan Alberto Guzman Vazquez	Name	Juan Alberto Guzman Vazquez
		Position	Quality Control Manager
Signature		Address	CARR.TOLUCA-NAUCALPAN KM 52.8 PARQUE INDUSTRIAL TOLUCA 2000 EJE 1 NTE # 16 CP:50233 TOLUCA EDO. DE MEX. MEXICO
Title	Quality Control Manager	Tel	52-722-279-00-49
		Fax	52-722-279-36-16

Motorcycle 4-Cycle Oil to Be Filed	
Internal Product Name or No.	BARDAHL MOTOS 4T SINTETICO SAE 10W 40 API SN JASO MA2
Trade Name	BARDAHL MOTOS 4T
Viscosity Grade	SAE 10W-40
Performance Classification	MA MA1 MA2 MB
Oil Code Reference Number	M052BSB005

Circle one of MA or MA1 or MA2 or MB.

1. Quality on Engine Oil Specifications

Specifications	Categories
API ^{a)}	SG SH SJ SL SM ^{d)} SN^{e)}
ILSAC ^{b)}	GF-1 GF-2 GF-3
ACEA ^{c)}	A1/B1 A3/B3 A3/B4 A5/B5 C2 C3 C4

Circle the performance category satisfied.

^{a)} The performance levels and standards are documented in SAE J183, Engine Oil Performance and Engine Service Classification (Other than "Energy Conserving").

^{b)} The standards are documented in the Performance Standard for Passenger Car Engine Oils of the International Lubricant Standardization and Approval Committee (ILSAC)

^{c)} The performance levels are documented in ACEA European Oil Sequences.

^{d)} Excluding SM/EC

^{e)} Excluding SN/RC

2. Physicochemical Properties

Item		Test Method		Measured Value	Specification
		JIS K or JPI	ASTM		
Density (15°C)	g/cm ³	K 2249	D4052	0.8554	Report
Flash point	°C	K 2265	D92	224	Report
Kinematic viscosity (at 40 °C)	mm ² /s	K 2283	D445	94.93	Report
Kinematic viscosity (at 100 °C)	mm ² /s	K 2283	D445	14.51	Note 1
Viscosity index		K 2283	D2270	159	Report
Low-temp. Vis, CCS at -25 °C	mPa·s		D5293	5130	Note 1
High-temp. High-shear rate Vis. (at 150°C)	mPa·s	JPI-5S-36	D4683	4.1	2.9 Min.
Sulfated Ash	mass%	K 2272	D874	0.8	1.2 Max.
Acid number	mgKOH/g	K 2501	D664	1.4	Report
Base number (HClO ₄ method)	mgKOH/g	K 2501	D2896	8.0	Report
Evaporative Loss	mass%	JPI-5S-41	D5800	7.1	20 Max
Foaming Tendency (Tendency-Stability)	Seq. I	K 2518	D892	0/0	10 Max. - Nil
	Seq. II			0/0	50 Max. - Nil
	Seq. III			0/0	10 Max. - Nil
Shear Stability (by diesel injector method) (Kinematic Viscosity after the test at 100°C)	xW-30	ASTM D6278 (Note 2)	D6278	-	9.0 Min.
	xW-40			12.9	12.0 Min.
	xW-50			-	15.0 Min.
	mm ² /s Other grades			-	Stay in grade
Color (Visual inspection)			D1500	L2.5	Report
Element analysis mass%	Calcium	JPI-5S-38	D4951	0.14	Report
	Barium	JPI-5S-38	D4951	-	Report
	Magnesium	JPI-5S-38	D4951	-	Report
	Zinc	JPI-5S-38	D4951	0.10	Report
	Boron	JPI-5S-38	D4951	0.01	Report
	Phosphorus	JPI-5S-38	D4951	0.09	≥ 0.08 and ≤ 0.12
	Nitrogen	K 2609	D4629	0.11	Report
	Sodium	JPI-5S-38	D4951	0.05	Report
	Sulfur	K 2541	D4951	0.27	Report
	Molybdenum	JPI-5S-38	D4951	-	Report
Other elements > 100 ppm (except carbon, hydrogen, and oxygen)				-	Reported
Infrared absorption spectrum analysis (0.1 mm sealed absorption cell)				A4 size IR chart is attached	

NOTE 1 In accordance with Engine Oil Viscosity Classification, SAE J300.

NOTE 2 Test shall be conducted under the standard test conditions (30 cycles).

3. Clutch Test Results of Friction properties (JASO T 903:2016 ANNEX A)

Test Method	Items	Test Results	Standard Index			
			MA	MA2	MA1	MB
JASO T903:2016	*DFI (Dynamic Friction Characteristic Index-DFI)	2.02	>1.35 and <2.50	≥1.50 and <2.50	≥1.35 and <1.50	≥0.40 and <1.35
	*SFI (Static Friction Characteristic Index-SFI)	2.29	≥1.45 and <2.50	≥1.60 and <2.50	≥1.45 and <1.60	≥0.40 and <1.45
	*STI (Stop Time Index-STI)	1.82	≥1.40 and <2.50	≥1.60 and <2.50	≥1.40 and <1.60	≥0.40 and <1.40

We hereby warrant that the test results described in this document indicate typical figures of the motorcycle four-cycle oil concerned, and representative performance of the product that will be marketed as such.

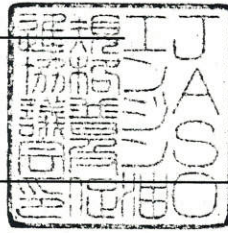
The test reports were prepared according to the format specified in the JASO Standard and the retained test reports are kept under our own responsibility. We herewith submit a representative example of performance classification marking and a copy of the label of the motorcycle 4-cycle oil concerned that will be used on containers and documentation.

Note:

- 1) Refer to the "MOTORCYCLES-FOUR-CYCLE GASOLINE ENGINE OILS (JASO T 903:2016) IMPLEMENTATION MANUAL" in filling in this form.
- 2) The current version of the JASO test procedure at the time of submission must be used to generate test data which are reported in the documents submitted.
- 3) The management fee is Yen 40,000 per submission. It should be paid into the following bank accounts, and a certificate of the payment should be attached to the documents being submitted to the JASO Engine Oil standards Implementation Panel.

Appointed Bank:	Funabashi Branch
	of the Suritomo Mitsui Banking Corporation
Account No:	Ordinary Deposit #6359999
Owner of the Account:	The Japan Lubricating Oil Society
Or	
Appointed Bank:	Funabashi Branch
	of the Tokyo-Mitsubishi UFJ. Ltd.
Account No:	Ordinary Deposit #1036018
Owner of the Account:	The Japan Lubricating Oil Society

- 4) In the case where a false report is made, and labeling of the performance of a product and sales were made based on such a report, the company concerned may be penalized under the Act against Unjustifiable Premiums and Misleading Representations of Japan, Article 4, Item 1 or the Unfair Competition Prevention Laws of Japan, Article 2, Item 10, or any other equivalent laws in the country in which the product is marketed.

Only for the Use of the JASO Engine Oil Standards Implementation Panel	
Person responsible for receipt- Name: <u>J. Shimazaki</u>	Seal: 
Date of receipt: <u>2017. 3. 21</u>	
Receipt number: <u>M 1703/301</u>	
Remarks:	