



# Balmerol Race 4T SAE 20W-50 API SL / JASO MA2

Four Stroke Motorcycle Engine Oil

# **Product Data Sheet**

## Product Description

Balmerol Race 4T SAE 20W-50 API SL / JASO MA2 is a superior performance engine oil, especially formulated for lubricating all types of 4-stroke engines of two and three wheelers running on Gasoline. It is based on highly refined mineral base oil and proven additive system. Balmerol Race 4T SAE 20W-50 is a high-quality engine oil which helps to resist the effects of high temperatures found in 4-stroke motorcycle engines. Its super heat guard formula works to reduce the harmful impact of high operating temperatures on critical engine components during use. Helps keep pistons clean and reduce wear to keep your motorcycle's engine running smoothly. Balmerol Race 4T SAE 20W-50 is blended from selected base stocks and fortified with synergistic additive systems to meet the performance requirements of API SL.

# **Applications / Recommendations**

Balmerol Race 4T SAE 20W-50 API SL / JASO MA2 is suitable for motorcycles where a 20W-50 API SL (and below) and JASO MA2 (or MA) oil is recommended. Balmerol Race 4T SAE 20W-50 provides outstanding protection against high temperature piston deposits, wear, corrosion, foaming, oxidation stability and soot accumulation. It is has an excellent shear stability to maintain viscosity under severe high temperature operations. Balmerol Race 4T SAE 20W-50 provides enhanced engine life and long standing protection of engine components, superior engine cleanliness, and outstanding all weather performance.

### Availability

MCO NonMatic Balmerol Race 4T SAE 20W-50 API SL / JASO MA2 is available in 800 ml packing (Bottle).

No	Characteristics		Unit	Method	Specification
1	Appearance			Visual	Clear & Bright
2	Colour			Visual	Light Brown
3	Kinematic Viscosity @ 100°C		cst	ASTM D-445	16.3 – 21.9
4	Viscosity Index			ASTM D-2270	120 min
5	Flash point, COC		<sup>0</sup> C	ASTM D-92	200 min
6	Pour Point		<sup>0</sup> C	ASTM D-97	(-) 18 max
7	Total base number, TBN		Mgm KOH/gm	ASTM D- 2896	5 min
8	Sulfated ash		% by wt	ASTM D-874	0.6 - 1.2
9	Cold cranking viscosity,@ (-) 15°C, CCS		cps	ASTM D-5293	9500 max
10	Metal content				
	a)	Calcium	% by wt		0.20 min
	b)	Magnesium	% by wt	ASTM D-4628	0.01 max
	c)	Zinc	% by wt		0.08 min
	d )	Phosphorus	% by wt	ASTM D-4047	0.08 - 0.10
11	Foaming tendencies / stabilities				
	a)	Sequence I	ml		10 / 0 max
	b)	Sequence II	ml	ASTM D-892	50 / 0 max
	c)	, , , , , , , , , , , , , , , , , , , ,	ml		10 / 0 max
12	High temp. high shear viscosity@ 150°C, HTHS		cps	ASTM D-4683	3.7 min
13	Copper strip corrosion, @ 100°C			ASTM D-130	1b max
14	Noack evaporation loss		% by wt	ASTM D-5800	15 max
15	Sequence IV, high temp		ml	ASTM D-6082	100 / 0 max
16	Stability Shear 30 cycles		cst	CEC L-14-A-93	15.0 min

### **Technical Data**

### Health and Safety

Balmerol Race 4T SAE 20W-50 is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet are followed.

For further information, contact: **PT. Balmer Lawrie Indonesia** 

Graha STR 2<sup>nd</sup> floor suite 203, Jl. Raya Ampera No. 11 Ragunan, Jakarta Selatan, Indonesia Tlp : 021-781 8162 ; Email : <u>cs@bli.co.id</u> ; Website : <u>www.bli.co.id</u>