

DIRGHAYU IM-MB 100 CL - S

Green – Biobased Mill bearing lubricant for sugar factories



'PRODUCT INFORMATION'

Application-

Mill bearing is most important & critical process in any sugar factory. The milling rollers have very heavy load & very low speed. They are supported with journal bearings at both ends. Tandem of 4 to 6 mills is used upto 5000 TCD plant. The Journal bearings get the lubrication from centralized auto lubricator. The material used in journal bearing is very sensitive to high temps. Uniform thin film of lubricant is continuously provided in the bearing to overcome friction & reduce temp.

Properties & Benefits-

Dirghayu' Mill bearing lubricant IM-MB-100 CL-S is from 'Dirghayu' biobased lubricant product range. Being biobased, it has very high lubricity compared to petro or synthetic. This can be verified from very low four ball scar diameter in TDS.

High lubricity is the priority requirement for journal bearings, running with heavy load & slow speed. Moreover, the bearing material is sensitive to high rise in temp. Due to very high lubricity, there is reduction in rise in temp. compared to petro based or synthetics. Moreover, there is direct energy saving as energy lost in friction is min.

The polar nature, unlike petro or synthetic, provides strong thin film adhering to metal or substrate. There is no spill off on heavy load. Hence EP load requirement of lubricant is low. Moreover, there is no metal to metal contact and good boundary layer lubrication, avoiding temp. rise.

High viscosity index of 355 compared to about 100 of petro or synthetic means little change in viscosity during operations. No dripping due to thinning down at high temps.

This is fluid grease with 000 NLGI grade. This can be pumped & transferred to any lubrication points of auto lubricant.

The unique property of mill bearing lubricant is of biodegradable & non toxic food grade quality. There is no danger to purity of the cane juice even in case of accidental mixing. Thanks to biobased properties.

The base oil is polyol and hence has excellent high temp. oxidative stability. As a natural property, the oil provides anti rust, water and steam resistance. Selective additives provide all required protections.



TECHNICAL DATA SHEET

SR NO	SPECS	UNIT	STD	IM MB 100 CL
1	NLGI Grade			000
2	Appearance			Fluid
3	Colour			Amber
4	Base oil			Chemically modified Vegetable oil
5	Thickener Type			Organically Modified clay
6	Density @15 °C	Kg/m ³		900
7	Viscosity @ 40 °C	centistokes	D445	1500
8	Viscosity @ 100 °C	centistokes	D445	311
9	Viscosity Index			355
10	Flash Point	°C	D92	180
11	Copper corrosion		D130	1a
12	Four ball weld load	Kg	D2783	>400
13	Four ball Scar diameter	mm	D2266-01	0.52
14	Pour point	°C	D97	(-)5
15	operating temp	°C		(-)5 to 150

COMMITTED TO ENERGY CONSERVATION & ENVIRONMENT PROTECTION

Manufactured by:

M/s. Intech Energy Systems Pvt Ltd, S NO. 1073 / 1, 2, 3, Mutha
Road, Pirangut, Pune-412 111 (India).

Tel: .020-22922350-53 Fax: 020-22922180.

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