

# DIRGHAYU

IM-RTL-100 , IM – HTL 200 & IM HTL 300

Green – biobased Chain Oils



## 'PRODUCT INFORMATION'

*'Dirghayu'* Moderate temp. chain oil IM – HTL - 100 , Medium Temp Chain Oil IM - HTL – 200 & High Temp Chain Oil IM- HTL -300 are from 'Dirghayu' biobased lubricant product range. Being biobased, they have very high lubricity compared to petro or synthetic high temp. chain oils. This can be verified from very low four ball scar diameter in TDS.

High lubricity is the priority requirement for bearing wheels and joints of any chain of the conveyor. This can be verified by monitoring current of the drive with dry & lubricated condition. It is observed that, there is reduction in drive current of 8% to 15% or even more from dry to lubricated chain. This is natural, as lubricated chain has reduced friction & reduced related drive current. Reduced friction naturally increases the life of the chain, as there is min. wearing.

The polar nature, unlike petro or synthetic, provides strong adhesion of thin film of oil to metal or substrate. Thus there is no metal to metal contact and good boundary layer lubrication. No drip or hard residues.

High viscosity index of 200 means little change in viscosity even at high temp. Thus no dripping due to thinning down at high temps.

The base oil has high flash point and less evaporation. This lowers consumption oil from burning at elevated temp.

The chain oil is biodegradable & non toxic. This will protect the Green environment, even after evaporation. Thanks to biobased properties.

The base oil is chemically modified vegetable oil or ester or polyol. This has excellent high temp. oxidative stability. As a natural property, the oil provides anti rust, water and steam resistance. Selective additives provides all required protections.

### Instruction for applications –

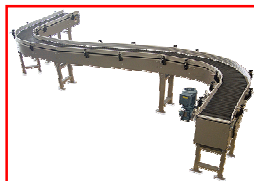
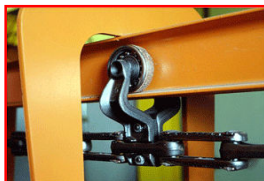
Clean with Dirghayu biobased spark clean cleaner. This will ensure best removal of rust, oil and dust from chain.

Apply the lubricant by brush, dip or immersion or using suitable auto lubrication system (Pl. refer catalogue of auto lubrication unit from Intech, if required).

Check the drop in drive current after, application and watch it during use. The re-oiling will be due when the drive current rises to original dry level.

**CAUTION** – In case of powder coating or sand blasting, pl. ensure that, dry powder or sand is not reaching to conveyor chain. Pl. refer to our note on preventive systems.

**APPLICATIONS** – Conveyor chains, sliders, joints or movements operating at high temp. in ovens or near furnaces. This is applicable to 2 , 3 or 4 wheel chain conveyors or slat conveyors on ground or overhead . In case of I Beam conveyors, there is option to lubricate the bearings & joints by oils. The wheels, however can be filled with suitable grease as per temp.



## TECHNICAL DATA SHEET of IM – RTL 100 , IM – MTL – 200 & IM HTL 300

Sr. No.	Property	Unit	Test Method	<u>IM-RTL-100</u>	<u>IM-MTL 200</u>	<u>IM HTL 300</u>
1	Appearance		Visual	Yellow	Yellow	Amber
2	Density @15°C	Kg/m <sup>3</sup>	Hydrometer method	885	885	915
3	pH		pH Method	7.4	7.2	7.2
4	Viscosity @ 40°C	Centistokes	ASTM D 445	156.4	156.8	200
5	Viscosity @ 100°C	Centistokes	ASTM D 445	26	25.4	24.6
6	Viscosity index		ASTM D 2270	202	197	190
7	Water Content	ppm	Evaporation method	320	345	330
8	Acid Number	Mg KOH/g	AOCS Te 1a-64	0.79	0.81	0.89
9	Flash Point	°C	ASTM D 92	150	200	280
10	Copper Corrosion Test		ASTM D 4048	Pass	Pass	Pass
11	pour point	°C	ASTM D 97	(-) 10 <sup>0</sup> C	(-) 5 <sup>0</sup> C	(-) 15 <sup>0</sup> C
12	Four Ball scar	mm	ASTM D 4172	0.63	0.59	0.54
13	Four Ball weld load	Kg	ASTM D 2783	200	240	180

**COMMITTED TO ENERGY CONSERVATION & ENVIRONMENT PROTECTION**

Manufactured  
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.  
Website -www.intechenergy.com. Email: sales@intechEnergy.com

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