



Bio-Lube:

Environmentally compliant solution for conveyor chain lubrication

OSDEC BIO-LUBE, a heavy duty chain lubricant made from plant extracts and is especially formulated for heavy industry use. Able to withstand high pressure usage whilst maintaining the desired viscosity, penetration and film thickness, thus enabling it to effectively separate and lubricate moving metal surfaces under heavy loads.

Its long linear polymers with colloidal aspects enhance its unique lubricating property of high resistance to frictional wear, heavy load and hydrophobic, with increased adhering properties and low coefficient of friction.

Application:

OSDEC BIO-LUBE is designed for a broad range of heavy industry chain lubrication applications is reliable, affordable, and offers a faster rate of Return on Investment (ROI) that is beneficial to both the user as well as the delicate environment.

In daily operations, lubricating oil leaking into the environment is unavoidable due to maintenance work, accidental spills, leaks, rain and washing activities.

- ◇ Alternative to mineral oil and dry conveyor chain system

Benefits:

OSDEC BIO-LUBE is environmentally friendly, with longer lasting lubrication properties needs to be applied less frequently, thus offering realistic economic advantages in reducing cost, on top of the following benefits:

- ◇ Reduces corrosion
- ◇ Reduces chain snapping
- ◇ Ensures cleaner and well lubricated chains
- ◇ Reduces parts wear and tear
- ◇ Increases efficiency and productivity
- ◇ Reduces labour and manpower
- ◇ Reduces equipment breakdown
- ◇ Reduces friction load, heat and noise
- ◇ Extends equipment maintenance schedule
- ◇ Increases lifespan of chain, motor and other parts
- ◇ Promotes a cleaner working area and components
- ◇ Meets environmental legislative requirements

OSDEC BIO-LUBE is a plant based lubricant. By replacing current hazardous mineral based lubricants, the potential risk involving ENVIRONMENTAL COMPLIANCE, health, legal and DOE regulations are greatly minimized.

Waste Water Analysis:

OSDEC BIO-LUBE is an effective proven alternative solution to current process chain lubrication that offers DOE compliance to effluent discharge. Further reduction can be achieved by replacing the cylinder cleaning detergent to an environmentally friendlier one.

Effluent Discharge Reading for Typical LPG Plant

Parameters	Result BEFORE using Osdec Bio-Lube (ppm)*	Result AFTER using Osdec Bio-Lube (ppm)**	Standard "B" Effluent Discharge Limit#
BOD	16,950 - 600	26	50
COD	20,717 - 300	67	200
Oil & Grease	1,165 - 280	1.33	10
Iron (Fe)	61 - 22	1.23	5

* Range of reading from various locations

** Average result from sample locations

Environmental Quality Regulations, 2009

Conductive Working Environment:



Before **OSDEC BIO-LUBE** application –
Wet and slippery



Dry and clean environment after using **OSDEC BIO-LUBE**

Packaging Specification

Product Code	Packaging
CS-201-988	200 L Drum

Manufactured by:

Osdec INTERNATIONAL SDN BHD
23 Jalan PJU 3/45, Sunway Damansara
47810 Petaling Jaya, Selangor, Malaysia
Tel: +603-7880 0277 Fax: +603-7880 9266

Technical Data:

Physical and Chemical Properties:

State: pale yellow liquid, mild odour

Solubility in Water (g/L): Insoluble

Boiling Point : 760 mm Hg:>200°C Volatiles, % by Volume: <2

Specific Gravity (water=1): 0.88

Flash Point: over 120° C (300 ° F) min (ASTM 93)

Lower Explosive Limit (%): Not Applicable

Upper Explosive Limit (%): Not Applicable

pH(as supplied): 7±0.2

Viscosity at 40° C (mm²/s): 4.1

Hazard Identification:

RISK: None under normal operating conditions.

SAFETY: None under normal operating conditions.

Stability and Reactivity:

GENERAL:

This product is stable and hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion produces carbon monoxide, carbon dioxide along with thick smoke.

Regulatory Information:

Section 312 Extremely Hazardous Substances:

None

Section 311/312 Hazard Categories:

Non-hazardous under Section 311/312

Section 313 Toxic Chemicals: None

RCRA Status:

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste, (40 CFR 261.20-24).

Call today and find out more how

**OSDEC can help you save time,
money and the environment**

Local Distributor: