

> APPLICATION BULLETIN

LubriOne[™] Internally Lubricated Formulations For Conveyor Belt Gears

With high strength and durability, metal has been a reliable material for machinery parts for centuries, however, more commonly traditional materials are being replaced by plastic alternatives that offer performance, cost and sustainability benefits.

This is true for machinery gears, such as those used in convey belts. Often running continuously, they build up heat and can wear away over time, requiring regular maintenance and external lubrication to keep machinery running smoothly. Metal gears are susceptible to corrosion, so they degrade over time and need replacing.

EXTEND PART LIFE AND REDUCE MAINTENANCE

LubriOne[™] internally lubricated formulations have similar structural performance characteristics to metal, making them an ideal alternative for conveyor belt gears.

With a low co-efficient of friction they reduce heat build-up, noise and vibrations, and are corrosion resistant, extending part life. Formulated with internal lubrication they reduce the need for external lubricants like oil and grease, reducing part maintenance, so you can keep things moving.

MANUFACTURING EFFICIENCY

LubriOne[™] polymers offer greater design freedom compared to metal and improved manufacturing efficiency. With only one machine required for production of a plastic gear, these formulations can reduce manufacturing steps, processing time and material costs.

KEY CHARACTERISTICS

- Excellent wear resistance
- Reduced friction, heat build-up, noise and vibration
- Improved processability and surface finish on parts
- Lower power requirements and low maintenance
- Design flexibility
- Reduced weight



SOLUTIONS AVAILABLE

LubriOne [™] Portfolio PA66, PA6 and Polyketone formulations with	Lubricants & Performance		
reinforcement available	Lubricant	Color	Performance
LubriOne NN	PTFE	Natural	Shears and creates a PTFE film transferred to the matting surface.
LubriOne NY	Silicone	Natural	Boundary lubricant. In combination with PTFE provides immediate lubrication.
LubriOne LB8900 (PTFE grades only)	Molybdenum Disulfide	Grey	Reduces "slip stick" and acts as nucleating agent.
	PFPE	Natural	Migrates to the surface, but not all of it since some is trapped in the polymer.
	Graphite	Grey	Ideal for underwater applications since graphite molecules slide over one another easily with low friction.
	Aramid Fibers	Yellowish	Softer and less abrasive than carbon or glass fiber, commonly used for reduction in the wear of the mating surface, especially softer materials.
	Carbon Fibers	Grey	Softer and less abrasive than carbon or glass fiber, commonly used for reduction in the wear of the matting surface, especially softer materials.

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