



## » PRODUCT BULLETIN

# LubriOne™ Internally Lubricated Formulations – PTFE-free Solutions

LubriOne™ Internally Lubricated Formulations are self-lubricating polymers, offering low coefficients of friction (COF) and improved wear-resistance properties for molded parts. These materials combine the unique benefits of various internal lubricants with a wide array of base engineering resins.

Extending the existing portfolio, PTFE-free LubriOne Internally Lubricated Formulations are made without polytetrafluoroethylene (PTFE). This helps customers adhere to proposed regulatory restrictions surrounding the use of polyfluoroalkyl substances (PFAS) of which PTFE is classified as.

PTFE-free LubriOne formulations avoid the use of any fluorinated content, utilizing lubricants such as molybdenum disulphide (MoS<sub>2</sub>), Ultra High Molecular Weight Polyethylene (UHMWPE) and graphite in a wide array of engineered base resins. They provide similar performance characteristics to conventional grades formulated with PTFE, helping to reduce friction, noise, vibration, and heat build-up as well as improve product durability in applications that involve mating surfaces or extreme wear. Applications include gears, pulleys, hinges, automotive parts, drawer guides and rollers, and conveyor belts.

## KEY CHARACTERISTICS

- Excellent wear resistance
- Reduced friction, heat build-up, noise & vibration
- Improved processability & surface finish on parts
- Lower power requirements & low maintenance
- Reduced tool contamination and corrosion
- Reduction in lubricant migration time
- Design flexibility
- Reduced weight
- Chemically resistant

## MARKETS & APPLICATIONS

Ideal for applications in many industries including transportation, industrial, household, electrical and electronics including:

- **Transportation** – Fuel flap axis, interior door handle axis, gears, seat mechanics, sun-roof sliding mechanisms, side mirror parts
- **Industrial** – Conveyor belt gears, pulleys
- **Household** – Window/door runners, furniture parts, hinges
- **Electrical and electronics** – Electrical plug safety parts, printers, barcode scanners

## EUROPE GRADES

Material Name	Base Resin	Reinforcing Filler	Lubricating Filler
LubriOne LB6000-5024 RS HI natural	PA6	GF10	UHMWPE
LubriOne LB6000-5021 RS S1		GF30	UHMWPE
LubriOne LB6000-5021 RS X2		GF30	UHMWPE
LubriOne LB6000-5019 X1 black		GF50	UHMWPE
LubriOne LB6700-5001 RS AF black	PA6/PA66	GF50	UHMWPE
LubriOne NN-000/01M black SO	PA66	Unfilled	MoS2
LubriOne REC LB6600-5030 RS grey		GF33	Graphite
LubriOne LB3300-5010 RS natural	PBT	GF20	UHMWPE
LubriOne LB3300-5005 RS natural		MI20	UHMWPE
LubriOne REC LB3220-5001 RS C natural X1	PC	GF10	UHMWPE
LubriOne LB8900-5010 GP grey	PKE	Unfilled	Graphite
LubriOne LB8900-5006 RS PE natural		GF20	UHMWPE
LubriOne LB8900-5004 RS PE natural		GF30	UHMWPE
LubriOne LB4200-5022 black	POM	Unfilled	MoS2
LubriOne LB4200-5023 natural		Unfilled	UHMWPE
LubriOne LB9200-5012 RS PE natural	PPS	GF30	UHMWPE

## ASIA GRADES

Material Name	Base Resin	Reinforcing Filler	Lubricating Filler
LubriOne LB6600-8056 LB BK001	PA66	Unfilled	LDPE
LubriOne LB6600-8054 RS BK001		CF30	LDPE
LubriOne LB6600-8052 RS BK001		GF30	LDPE
LubriOne LB4200-8032 RS NC001	POM	GF30	LDPE
LubriOne LB4200-8030 AR NC001		AF10	LDPE
LubriOne LB4200-8026 LB BK001		Unfilled	LDPE+HDPE
LubriOne LB3200-8022 LB BK001		PC	Unfilled
LubriOne LB3200-8021 RS BK001	GF30		UHMWHDPE
LubriOne LB7600-8008 RS BK001	PPO	GF20	UHMWHDPE

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