KILFROST
K400

A superior anti-freeze lubricant formulated to allow and ensure effective pneumatic equipment operations in even the harshest of environments.



Kilfrost

WHY USE AN ANTI-FREEZE LUBRICANT?

Water can often get into the air feed of pneumatic equipment, and in cold weather conditions this water can freeze with the resulting risk of blockage in the air lines. This means increased down time and maintenance. For many years, Kilfrost K400 anti-freeze lubricant has been the go-to fluid of choice for many industries including civil engineering, construction, mining, logging, plus oil and gas exploration, approved and trusted by many of the world's compressed air equipment manufacturers. Kilfrost K400 remains the superior anti-freeze lubricant with exceptional performance in all departments.

- Superior prevention of moisture freezing and equipment failures
- Stronger anti-wear and lubrication capability to protect all pneumatic tools
- Enhanced corrosion protection for longer equipment lifetime

HOW DOES IT WORK?

Kilfrost K400 absorbs the water in the air line, depressing the freezing point, thus eliminating freezing. K400 maintains high lubricity, unlike other air line oils whose lubrication qualities deteriorate rapidly when water is present. K400 is a semi-synthetic lubricant that has none of the drawbacks associated with mineral oils.

INDUSTRIES:

Using Kilfrost K400 brings very real benefits to multiple industry applications, protecting equipment for longer, meaning less machine failure, less maintenance interventions and importantly, less downtime for your tools. There are numerous industries where extreme temperatures must be considered, leading them to require a reliable and cost-effective lubricant and anti-freeze product for pneumatic tools. These sectors include:

- Civil engineering
- Mining
- Construction
- Concrete plants
- Oil and gas
- Transportation services
- Logging
- Pulp and paper
- Shipyards
- Contractors
- Quarries
- Utilities

EQUIPMENT USES:

Air controls, air motors, buffers, chamfering tools, chippers, chisels, control valves, cutters, deburring tools, drills, excavators, grinders, impact wrenches, jackhammers, nibblers, nut runners, polishers, riveting tools, rock drills, scalers, sanders, shears, and tampers.

Table 1: Kilfrost K400 Typical Properties

SHELF LIFE FROM MANUFACTURE	18 months	**PH VALUE (1:1 WITH WATER)**	8.2
APPEARANCE	Light amber	**POUR POINT ASTM D97, °C**	-60
SPECIFIC GRAVITY AT 15°C	1.07	**COLOUR, ASTM D1500**	3.5 - 4.5
VISCOSITY CTS AT 40°C	24.7	**CAST IRON CHIP TEST**	Negative

Table 2: Kilfrost K400 Viscosity Properties

TEMP °C	TEMP °F	°ENGLER	CENTISTOKES
30	86	4.40	34.5
10	50	10.50	81
0	32	18	140
-10	14	34	261
-30	-22	180	1370

Table 3: Comparison of K400 and Competitive Product Lubricant Properties

METHOD	TEST	PREVIOUS GENERATION RESULTS	K400 RESULTS	RESULT INTERPRETATION
IP 239 Modified	4 Ball Anti-Wear Properties @ 32 kg	MWSD = 1.56 mm	MWSD = 1.37 mm	Smaller scar implies better anti-wear **K400 superior**
IP 239	4 Ball Extreme Pressure Weld Load	Passing Load = 140 kg Weld Point = 145 kg	Passing Load = 445 kg Weld Point = 450 kg	Higher the load before weld is better **K400 superior**
ASTM D 3233B	Falex Pin & Vee Block Machine	Failure Load = 1360 kgf	Failure Load = 1930 kgf	Higher load is better **K400 superior**



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Kilfrost Limited, Albion Works, Haltwhistle, Northumberland, NE49 0HJ, UK
+44(0)1434 320 332 // info@kilfrost.com // www.kilfrost.com