

Balmerol[®] Protomac C & C (SPL) Series

Steam Cylinder Oils

Technical Data Sheet

Product Description:

Balmerol Protomac C Series are formulated from highly refined base oils having excellent oiliness and film strength properties. They have got excellent resistance to oxidation and thermal breakdown under high temperature. They resist water washout and minimize deposit formation even at elevated temperatures. Balmerol Protomac C Series oil meet IS: 1589 (1994) Type 1. They are recommended for steam cylinder lubrication operating at steam temperatures below 300°C.

Balmerol Protomac C (SPL) Series are blended from same base stock as C series, but compounded with special fatty oil to impart excellent oiliness and film strength. They are recommended for steam engines operating under wet saturated steam conditions. Balmerol Protomac C (SPL) Series oils meet IS: 1589 (1994) Type 2. These oils are suitable for calendar bearings and sugar mill roll bearings lubrication. They are also recommended for lubrication of worm gears.

Features & Benefits:

Excellent film strength at high temperatures

Excellent equipment protection at high temperatures, reduced unscheduled downtime

Low deposit forming tendency

Less deposits at areas subjected to high localized temperatures. Components remain clean during operation

Better Anti-wear & lower friction properties

Reduction in wear of components leading to higher equipment reliability

Applications / Recommendations:

Balmerol Protomac C Series & Balmerol Protomac C (SPL) Series oils are recommended for Steam Cylinder lubrication, bearings, worm gears etc.

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Typical Properties:

Balmerol Protomac C Series						
Properties	C1	C2	C3	C4	C5	C6
Viscosity, ASTM D 445						
cst @ 40°C	420 -490	500 -580	580 -620	630 -740	750 -900	901 -1100
Viscosity Index, ASTM D 2270	90 minimum	85 minimum	85 minimum	85 minimum	85 minimum	85 minimum
Pour Point, °C ASTM D 97	6 max	6 max	6 max	6 max	6 max	6 max
Flash Point, °C ASTM D 92	260 minimum	260 minimum	260 minimum	260 minimum	260 minimum	260 minimum
Copper Strip Corrosion, ASTM D 130, 3 hrs @ 100°C	Pass 1a	Pass 1a	Pass 1a	Pass 1a	Pass 1a	Pass 1a

Balmerol Protomac C (SPL) Series					
Properties	C1 (SPL)	C2 (SPL)	C3 (SPL)	C4 (SPL)	C5 (SPL)
Viscosity, ASTM D 445					
cst @ 40°C	420 -490	500 -580	580 -620	630 -740	780 - 820
Viscosity Index, ASTM D 2270	90 minimum	85 minimum	85 minimum	85 minimum	85 minimum
Pour Point, °C ASTM D 97	6 max	6 max	6 max	6 max	6 max
Flash Point, °C ASTM D 92	280 minimum	280 minimum	280 minimum	280 minimum	280 minimum
Copper Strip Corrosion, ASTM D 130, 3 hrs @ 100°C	Pass 1a	Pass 1a	Pass 1a	Pass 1a	Pass 1a
Saponification Value, mg KOH/g	9 - 14				

Health and Safety:

Balmerol Protomac C Series & Balmerol Protomac C (SPL) Series oils are not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. For MSDS please contact your local Balmer Lawrie Marketing / Technical Service team.

For Further Information, contact:

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