



Balmerol® Protomac Spindle Oils [Protomac SP (EL) & Protospin 22]

Spindle Oil Technical Data Sheet

Product Description:

Balmerol Protomac Spindle oils are a light bodied mineral oil fortified with anti-wear, anti-oxidant and anti-rust additives to protect parts against rust and corrosion. Meets IS: 493-1981 (Part-2).

Features & Benefits:

Balmerol Protomac Spindle oils are provides the following benefits:

- Excellent oxidation stability
- Non-Corrosiveness to metals
- Extended maintenance intervals
- Increased productivity
- Decreased maintenance cost
- Excellent protection from rust
- Excellent anti-wear properties
- Lower overall waste

Applications / Recommendations:

Balmerol Protomac Spindle oils are recommended for lubrication of textile and machine tool
high speed spindle bearings, timing gears, positive displacement blowers and for tracer
mechanism and hydraulic systems application of certain high precision machine tools





Balmerol[®] Protomac Spindle Oils [Protomac SP (EL) & Protospin 22]

Spindle Oil Technical Data Sheet

Typical Properties:

Balmerol Protomac Spindle Oils		
Properties	Protomac SP (EL)	Protospin 22
Colour & Appearance	Clear & Bright	Clear & Bright
Density @ 30°C (gm/cc), ASTM D1298	0.873	0.873
Viscosity, ASTM D 445, cst @ 40°C	10 - 14	20-24
Viscosity Index, min, ASTM D 2270	90	90
Pour Point, °C ASTM D 97	-3	-3
Flash Point, (COC),°C , ASTM D 92, min	144	144
Copper Strip corrosion@ 100° C, 3 hrs, max. ASTM D130	1a	1a
Acidity, IP 1(B)		
a) Inorganic (mg KOH/gm of oil)	Nil	Nil
b) Total (mg KOH/gm of oil)	0.04	0.04
Ash, % by mass, ASTM D482	0.003	0.003
Saponification Value (mg KOH/gm of oil), ASTM D 94	0.14	0.14

Health and Safety:

Balmerol Protomac Spindle 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:

Balmer Lawrie & Co. Ltd. SBU: Greases & Lubricants (G&L) Division P- 43, Hide Road Extension Kolkata: 700088 www.balmerlawrie.com