

Balmerol® Protoform 480

Heavy Duty Neat Oil For Cold Forging

Technical Data Sheet

Product Description:

Balmerol Protoform 480 is a cold forging fluid designed for medium to heavy duty applications. The additive package provides extended tool life and the residual film after the operation is easily degreasable. Protoform 480 is a thermally stable product, and is developed for the forming of high alloy, chrome steel, stainless steel Fasteners.

Features & Benefits:

Balmerol Protoform 480 is especially formulated to provide following benefits:

- No formation of black residues on components
- Less heat generation which prolongs the life of the oil as well as leads to perfect surface finish of the components
- Good rust preventive characteristics
- High EP content in the product extends Tool life

Applications / Recommendations:

- Due to high oxidation and thermal stability, the oil can be maintained in a tank and applied by flooding , or , by direct application on the heated incoming rods , for forming Nuts and Bolts

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Typical Properties:

Balmerol Protoform 480	
Properties	Protoform 480
Appearance	Dark yellow liquid
Density at 29.5 °C, gm/ml, ASTM D 1298	1.03 ± 0.05
Kinematic Viscosity, cSt @ 40°C, ASTM D 445	80 ± 10
Flash Point, °C, ASTM D 92	180
Copper Strip corrosion@ 100° C, 3 hrs, ASTM D 130	4

Health and Safety:

Balmerol Protoform 480 is 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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