



Product Data

Iloform TDN 81 N

Neat forming oil

Description

Castrol Iloform™ TDN 81 N is a high viscosity, chlorinated, heavy duty forming fluid. It is a blend of high performance extreme pressure and lubricity additives in a fully solvent refined paraffinic mineral oil.

Application

Iloform TDN 81 N is specially formulated for use in heavy duty deep drawing applications where extreme performance is required.

At the drawing periphery when the steel part is in contact with the die, there is a chemical reactivity on the metal surfaces whereby a nascent metallic chloride layer of molecular thickness is formed. This feature is important in high speed drawing of steel for extending the die life and improving the surface finish.

Iloform TDN 81 N is ideally suited for cold pilgering. The high percentage of stabilized chlorine incorporated in the blend enables maximum reduction per pass, simultaneously offering a high degree of finish both internally and externally.

Iloform TDN 81 N is designed to be used as received.

Advantages

- Contains a high performance extreme pressure additive package to provide high protection against wear and to enable long tool and die life which helps to cut downtime and tooling costs
- Enhanced lubricity package provides a homogenous highly lubricating film which reduces frictional heat resulting in an excellent surface finish and closer tolerances in manufacturing
- Can be removed by using alkaline process cleaners, also available from Castrol

Typical Characteristics

Description	Test Method	Units	Value
Appearance	Visual	-	Viscous, bright amber fluid
Density @ 29.5 °C	IP 160	g/ml	1.17
Kinematic Viscosity @ 100 °C	IP 71	mm²/s	15
Kinematic Viscosity @ 40 °C	IP 71	mm²/s	280
Copper Corrosion, 3hrs @ 100C	IP 154	Rating	4
Flash Point, COC	IP 36	°C	> 170

Subject to usual manufacturing tolerances.

User Advice

Iloform TDN 81 N is not recommended for use on cuprous metals as it may cause staining. Staining may also occur on high nickel alloys during storage and subsequent heat treatment.

Storage

To avoid product deterioration always keep the container/drum tightly sealed. Store the product in a cool, dry place away from direct sunlight. Prevent exposure to frost and avoid water ingress. For optimum product stability, it is preferable to store the product indoors between 5°C and 45 °C / 41°F and 113°F.

For more details, please refer to the product safety data sheet.

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