

Iloform™ MS 10

Synthetic forming fluid

Description

Castrol Iloform™ MS 10 is a synthetic, boron-free coolant containing a blend of high performance lubricity additives and a corrosion inhibitor system which provide dependable performance, when diluted with water.

Application

Iloform MS 10 is specifically designed to meet all the latest requirements for the forming process of electrical steel stamping of coated and uncoated steel, i.e. rotor manufacturing.

Iloform MS 10 can be run effectively between 3% and 5% in water.

Advantages

- Superior lubrication and cooling properties to provide high quality surface finish and ensure good tool and die life
- Excellent detergency, to achieve high cleanliness of finished parts and equipment and to provide good separation of smut, metal particles and swarf
- Good wetting action helps to reduce consumption
- Low residue eliminates inter-process cleaning and provides best compatibility with downstream processes, such as annealing
- Extended fluid life can help reduce maintenance and machine downtime
- Reliable corrosion protection, to avoid equipment corrosion and to provide adequate protection of the finished parts
- Good compatibility within a wide range of water hardness
- Supports improvements of working environment – Mild odour, free of solvent, chlorine and nitrite

Typical Characteristics

Description	Test Method	Unit	Value
Concentrate			
Appearance	Visual	-	Yellow, light hazy fluid
Density @ 15 °C	ASTM D4052 / ISO 12185	g/ml	1.05
Viscosity @ 20 °C	ASTM D445	mm ² /s	90
Dilution			
Appearance, 3% (400 ppm CaCO ₃ /l)	Visual	-	opalescent fluid
pH, 3% in DI-water	ASTM E70/97	-	10.1
Cast Iron Corrosion, 5% (360 ppm CaCO ₃ /l)	DIN 51360/2	-	0
Refractometer factor	-	-	1.66

Subject to usual manufacturing tolerances.

Concentration Control

Concentration is checked by a refractometer, multiplying the reading by refractive factor of the product. A more accurate determination of the concentration is obtained by titration. To obtain more detailed information, please contact our local office.

User Advice

For maximum service life, coolant systems should be cleaned and sterilised by treatment with system cleaner (i.e. Castrol Techniclean MTC 43) before changing to Iloform MS 10. Treatment entails the addition of approximately 1% system cleaner to the previous charge of coolant the day before it is due to be discarded. For full details see the Product Data Sheet for Castrol Techniclean MTC 43.

Iloform MS 10 is readily dispersed in water, forming an opalescent solution. To manually prepare the dilution, slowly add Castrol Iloform MS 10 to water, stirring for a few minutes. Using an automatic mixer, please ensure that water pressure is sufficient.

Additional Information

Additives	Boron	Formaldehyde releasing agent	Lubricity Additives	Amines	Chlorine
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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 the product safety data sheet.

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