

Iloform PS 303

Water-miscible, mineral oil-free forming fluid

Description

Castrol Iloform™ PS 303 is a water dilutable, mineral oil-free forming fluid with excellent wetting and film strength characteristics. Its unique chemistry offers excellent lubricity to help extending die life and reducing blemished or defective parts.

In addition, the versatility of Iloform PS 303 allows it to be used at a wide range of concentrations, making the product suitable for a multitude of forming operations.

Iloform PS 303 is free from chlorine and boron.

Application

Iloform PS 303 is designed for a variety of applications which include light to medium duty forming operations on ferrous alloys, such as stamping, deep drawing and wire drawing. Please consult Castrol prior to use on non-ferrous metals.

Iloform PS 303 can be run effectively between 5% and 15% in water.

Advantages

- Excellent wetting and film strength characteristics which can help to maximise tool life and surface finish
- High flexibility - variation of concentration allows for wide range of forming applications which enables possible product consolidation
- Excellent emulsion stability supports long service life in order to reduce maintenance and waste disposal cost
- Contains corrosion inhibitors, which provide excellent in-process protection for minimising rework cost due to corrosion
- Chlorine and boron free formulation helps meeting environmental goals and improving operator acceptance

Typical Characteristics

Description	Test Method	Unit	Value
Appearance of concentrate	Visual	-	Brown, clear to slightly hazy liquid
Density @ 15 °C	DIN 51 757	g/cm ³	1.06
Viscosity of concentrate @ 40 °C	DIN 51 562	mm ² /s	84
Mineral oil content	DIN 51 417	%	0
Appearance of dilution	Visual	-	Clear liquid
pH of dilution @ 3% in water	DIN 51 361	-	9.1
Corrosion Test of dilution @ 5% in water (20 °dH)	DIN 51 360/2	-	max 1
Boron-free	Lubricity Additive		Formaldehyde-free
√	√		

Concentration Control

The concentration of the Iloform PS 303 can be easily measured with an Atago Model N1 refractometer. The graph is a linear regression of actual readings from laboratory tests on laboratory prepared samples.

It is important to realise that refractometer readings are dependent upon the type of refractometer and water used. Atago Model N1 refractometers are available through Castrol Industrial .

Refractometer Factor = 1.6

User Advice

Iloform PS 303 can be cleaned using mild alkaline cleaners, also available from Castrol.

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