



Product Data

Techniclean™ 90 XBC

Aqueous mild alkaline process cleaner

Description

Castrol Techniclean™ 90 XBC is an aqueous, low alkalinity, industrial process cleaner containing surfactants and corrosion inhibitors.

The product is formulated without boron, formaldehyde releasing agents and monoethanolamine (MEA).

Application

Techniclean 90 XBC is designed for inter-operational and final process cleaning operations of ferrous and aluminium goods, suited for use in a wide range of modern spray, high pressure spray and intensive flood wash equipment. This cleaner effectively removes residues from parts and components after machining with soluble oils, light duty neat cutting or forming oils as well as thin corrosion preventive films, lubrication oils, swarf and general dirt.

Techniclean 90 XBC is formulated to be compatible with the Castrol Alusol XBB and Hysol XBB coolant ranges. When applied in cleaning processes after machining with Alusol and Hysol XBB coolants the used cleaner solution can be recycled to the previous XBB coolant emulsion system.

Though the product is particularly developed for in-process cleaning, Techniclean 90 XBC is also well suited for maintenance machine tool cleaning.

Conditions of Use

Concentration Range (low pressure spray, flood wash):	1 - 5%
Concentration Range (high Pressure spray):	1 - 2%
Temperature Range:	ambient - 70 °C
Spray Pressure:	up to 1200 bar
Water Hardness Range:	0 - 350 ppm CaCO ₃ (0 - 20 °dH)

Optimum conditions of use are depending on the detailed application requirements and the amount and nature of the soil being removed.

Advantages

- Leaves a thin temporary corrosion preventive film on the metal surface after drying – minimizes scrap rate which improves productivity
- Effectively minimises excessive foam – reduces costly risk of dangerous cavitations/damage of high-pressure pumps
- Excellent demulsifying properties provide easy skimming and long bath life – can help to reduce maintenance and disposal cost
- Suitable for low temperature cleaning operations - can support sustainability agenda, i.e. helping to reduce energy cost and to improve CO₂ footprint
- Versatile; multi-metal compatibility and suitable in hard and soft water – enables possible product consolidation
- Possibility of recycling the used cleaning solution into the Alusol and Hysol XBB coolants - can help to reduce operational cost thru lowering waste volume and reducing fresh water consumption

Typical Characteristics

Description	Test Method	Units	Value
Concentrate			
Appearance	Visual	-	Clear, pale to light yellow liquid
Density @ 20 °C	ASTM D4052	g/ml	1.03
Dilution			
Appearance (5% in DI-water)	Visual	-	Translucent to hazy liquid
pH (5% in DI water)	ASTM E70/97	-	9.9
Corrosion Protection (3% in DI water)	DIN 51 360/2	-	Grade 0

Subject to usual manufacturing tolerances.

Concentration Control

By titration:

1. Pipette 10 ml bath solution in a 250 ml Erlenmeyer flask and add 50 ml deionised DI-water
2. Add 2 drops of indicator solution methyl orange
3. Titrate with hydrochloric acid ($c = 0.1 \text{ mol/l}$) until colour changes from yellow to orange-red
4. Calculation: Concentration in % = required ml hydrochloric acid * factor **0.42**

Additional Information

In case of recycling the used cleaners solution into the coolant system the concentration of the emulsion is maintained by adding Alusol XBB or Hysol XBB concentrate up to the set level.

For further advice please contact your local Castrol representative.

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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Castrol Industrial, Technology Centre, Whitchurch Hill, Pangbourne, Reading, RG8 7QR, United Kingdom

<http://msdspds.castrol.com>