



Product Data

Techniclean™ 45 XBC

Aqueous mild alkaline process cleaner

Description

Castrol Techniclean™ 45 XBC is an aqueous, mild alkaline industrial process cleaner, containing highly effective corrosion inhibitors providing excellent temporary corrosion protection. The product is formulated without boron and formaldehyde releasing agents.

Application

Techniclean 45 XBC is designed for final cleaning operations on ferrous metal parts and components, suitable for use in a wide range of industrial spray and intensive flood wash machines. It is capable of providing several weeks temporary indoor corrosion protection on steel and cast iron metals, depending on storage conditions.

Techniclean 45 XBC effectively removes soluble and light neat cutting oils, lubrication oils, particles and general dirt.

Techniclean 45 XBC is designed 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.

Additionally Techniclean 45 XBC can also be used as a rinse and corrosion preventive additive in multi-stage washers as well as a service additive for alkaline cleaning and soluble cutting fluid systems to boost the alkalinity/pH level.

Conditions of Use

Concentration Range (low pressure spray, flood wash):	1 - 7%
Temperature Range:	ambient - 70 °C

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

Advantages

- Leaves a high performing temporary corrosion preventive film on the metal surface to help minimising the scrap rate during intermediate storage
- Excellent cleaning & corrosion protection in one process step, which can enable possible process rationalisation
- Low foaming at low temperature; allows for initial cold water start ups to reduce maintenance time and is economical through helping to lower energy cost
- Good product stability and good oil splitting support long bath-life to reduce maintenance and disposal cost
- Possibility of recycling the used cleaning solution into the Castrol 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, yellow -amber liquid
Density @ 15 °C	ASTM D4052	g/ml	1.11
Dilution			
Appearance (1% in DI -w ater)	Visual	-	Clear, colourless liquid
pH (1% in DI-w ater)	ASTM E70/97	-	9.5
Cast iron corrosion protection (2% in DI-w ater)	DIN 51360/2	-	Grade 0

Subject to usual manufacturing tolerances.

Concentration Control

By titration:

1. Pipette 20 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 = 0.5 ml/l) until colour changes from yellow to orange-red
4. Calculation: Concentration in % = required ml hydrochloric acid * factor **0.47**

User Advice

Techniclean 45 XBC may be used on aluminium with caution.

Test a sample first to ensure no staining or corrosion, as temperature, concentration and exposure time are all important.

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 to the product safety data sheet.

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