



# Techniclean™ S 581

Aqueous process cleaner for ferrous metals

#### Description

Castrol Techniclean<sup>™</sup> S 581 is an aqueous, mild alkaline industrial cleaner, containing highly effective biodegradable surfactants and corrosion inhibitors. It is free of inorganic salts and monoethanolamine.

#### Application

Techniclean S 581 is designed for inter-operational and final process cleaning operations of steel and cast iron goods, suitable for use in spray and intensive flood wash applications.

Techniclean S 581 effectively removes soluble oils, neat cutting or light forming oils, corrosion preventive films, lubrication oils, swarf and general dirt.

Techniclean S 581 is free from inorganic salts and is specifically suitable for use prior heat treatment or heat diffusion processes, such as gas- or plasma nitration.

### **Conditions of Use**

Concentration Range:	2 - 5%
Temperature Range:	20 - 80 °C
Spray Pressure:	up to 10 bar

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

#### **Advantages**

- Leaves a temporary corrosion preventive film on the metal surface to minimise scrap rate during short interoperational storage
- Rejects tramp oil to the surface of the fluid for easy removal to extend bath life which helps to reduce maintenance and disposal cost
- Low foaming at ambient temperature, which allows for initial cold water start ups and minimises the risk of downtimes associated with foam related washer stoppages in spray applications
- Free of monoethanolamine (MEA) this may help to fulfil aspects of legislative requirements or other requirements that specify that this chemical is excluded
- Free of inorganic salts no water rinsing required to improve parts surface quality. Also avoids soft-spots on surfaces that are subject to downstream heat treatment processes

## **Typical Characteristics**

Description	Test Method	Unit	Value
Appearance	Visual	-	Clear yellow liquid
Density@ 15 °C	ASTM D1298	g/ml	1.02
pH of Concentate	ASTM E70-97	-	11
pH of Dilution (3% in DI-Water)	ASTM E70-97	-	10.7
Cast Iron Corrosion @ 3%	IP 287	-	No stains

Subject to usual manufacturing tolerances.

# **Concentration Control**

- 1. Pipette 100 ml bath solution in a 250 ml Erlenmeyer flask
- 2. Add 2 3 drops of indicator solution methyl orange
- 3. Titrate with hydrochloric acid (c = 0,5 mol/l) until colour changes from yellow to orange-red
- 4. Concentration in % = required ml hydrochloric acid x factor 0,42

#### 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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