PRODUCT DATA SHEET

METAL MANUFACTURING

Q8 Corelli CRX

Aqueous Mild Alkaline Process Cleaner

Description

Q8 Corelli CRX is a high-performance, aqueous industrial process cleaner formulated with low alkalinity. It contains advanced surfactants and corrosion inhibitors to ensure effective cleaning while offering metal protection. This innovative formula is free from boron, formaldehyde-releasing agents, mono-ethanolamine (MEA) and monoisopropanol amine (MIPA), making it a safer and more sustainable choice for industrial applications.

Application

Q8 Corelli CRX is specifically designed for inter-operational and final cleaning of ferrous and aluminium components. It is optimized for use in modern spray, high-pressure spray, and intensive flood wash equipment. This cleaner efficiently removes machining residues, including:

- Soluble oils
- Light-duty neat cutting and forming oils
- Thin corrosion preventive films
- Lubrication oils
- Swarf and general dirt

Q8 Corelli CRX is fully compatible with the coolant Q8 Brunel XF 700 range, ensuring seamless integration with machining processes. When used in conjunction with Q8 Brunel XF 700 cutting fluids, the spent cleaning solution can be recycled back into the coolant system, promoting cost savings and sustainability. Additionally, it is suitable for machine tool maintenance cleaning operations.

Recommended Operating Conditions

- **Concentration (Low-pressure spray, flood wash):** 1 - 5 %
- **Concentration (High-pressure spray):** 1 - 2 %
- **Temperature Range:** Ambient - 70°C
- **Spray Pressure:** Up to 1200 bar
- **Water Hardness:** 0 - 350 ppm CaCO3 (0 - 20 °dH)

Optimal operating conditions depend on the specific application and the nature of contaminants being removed.

Key Benefits

- **Enhanced Corrosion Protection** – Leaves a thin, temporary protective film on metal surfaces, reducing scrap rates and improving productivity.
- **Low-Foam Technology** – Minimizes excessive foam, preventing costly pump cavitation and equipment damage.
- **Superior Demulsifying Properties** – Enables easy oil skimming, extending bath life and reducing maintenance and disposal costs.
- **Energy Efficiency** – Effective at low temperatures, supporting sustainability efforts by lowering energy consumption and reducing CO_2 handprint.
- **Versatile Compatibility** – Works with multiple metals and functions effectively in both hard and soft water, allowing for product consolidation.
- **Recycling Capability** – Used cleaning solution can be reintegrated into Q8 coolant systems, reducing waste volume and freshwater consumption while optimizing operational costs.

Concentration Control

To ensure optimal performance, the concentration can be measured by titration:

1. Pipette 10 ml of the bath solution into a 250 ml Erlenmeyer flask and add 50 ml of deionized water.
2. Add 2 drops of methyl orange indicator solution.
3. Titrate with 0.1 ml/l hydrochloric acid until the color changes from yellow to orange-red.
4. **Calculation:** Concentration (%) = ml of hydrochloric acid used × 0.36

Alternative method (refractometer):
The concentration can also be monitored using a refractometer. The refractometer reading (°Brix) multiplied by a factor of 1.8 gives the approximate product concentration.

Note:
The accuracy of the refractometer method depends on the level of pollution in the bath. For precise concentration determination, titration remains the reference method.

Additional Information

When recycling used cleaning solutions into the coolant system, maintain the desired emulsion concentration by adding Q8 coolant concentrate as needed.

For technical support and further assistance, please contact your local Q8 representative.