



CR - 2001

CORROSION REMOVING COMPOUND FOR ELECTROLYTIC OR IMMERSION APPLICATION

Description

CR-2001 is a powder, alkaline corrosion-removing compound suitable for rust removal by simple immersion of the article or by electrolytic action without causing material change in the dimensional characteristics of the treated article.

CR-2001 meets the requirements of specifications, MIL-C-14460 TYPE I, A-A-59260 and AMS-1379A TYPE II (powder).

Application

CR-2001 effectively removes rust, oil, grease, carbon, scale, paints and is mainly used for:

- rust, carbon, oil, grease and paint removal in one operation.
- heat scale conditioning for aircraft engine compounds.
- processing steel prior to phosphating
- processing magnesium prior to DOW coating.
- preparation of cast iron and steel in electrolytic tank, prior to plating.
- Any application where an alkaline, corrosion, rust and paint remover is required.

Usage

CR-2001 is used in dip tanks.

The immersion time depends on the amount of soil to be removed but generally a 15 - 60 minutes immersion time is sufficient to remove the most soil.

Air or mechanical agitation of the solution reduces the immersion time.

It is safe on ferrous, magnesium, titanium and stainless steel but should not be used on aluminum, tin, zinc and their alloys.

Recommended concentration and temperature limits

| | |
|---------------------------------|-----------------------------------|
| Rust, carbon and paint removal: | 15 – 40% in water at 90° – 100°C. |
| Heat scale conditioning: | 25 – 40% in water at 90° – 100°C. |
| Titanium cleaning: | 5 – 7% in water at 70° – 75°C. |
| Magnesium cleaning: | 3 – 4% in water at 90° – 100°C. |

Tank construction

Tank may be constructed of mild steel with stainless (type 316) heating unit.

Directions for electrolytic use

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|----------------------------|------------------------------------|
| Recommended concentration: | 6 – 20% in water at 85-95°C. |
| Voltage: | 6-8 volts. |
| Amperage: | 10 – 25 Ampere per dm ² |



Fast results are obtained by a short anodic cycle (30-60 seconds) followed by cathodic cycle for remainder of immersion time.

To keep hydrogen embrittlement within acceptable limits, a 30 seconds cathodic cycle followed by 60 – 120 seconds anodic cycle, repeated until parts are clean, is recommended.

Rinsing

The rinsing should be done either by overflowing, agitated water rinse (preferably hot), hot or cold water with pressure or with a steam cleaner.

Safety

CR-2001 contains strong alkali compounds. Avoid contact with skin and eyes. For further instructions refer to Material Safety Data Sheet (MSDS).

Packaging

CR-2001 is available in plastic drums of 50 kg.

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SMI, Inc.

SCIENTIFIC MATERIAL INTERNATIONAL

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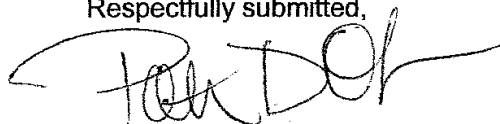
Product: **CR-2001**
Dilution: As received (powdered sample)

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A-A-59260; 29-Jul-1998
Corrosion Removing Compound, Sodium Hydroxide Base;
For Electrolytic or Immersion Application

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|-----|--|-----------------|
| 2.0 | Salient Characteristics | |
| 2.1 | Physical Form | <u>Conforms</u> |
| 2.2 | Composition | <u>Conforms</u> |
| 2.3 | Solubility (turbidity) | <u>Conforms</u> |
| 2.4 | Sodium Hydroxide Content | <u>Conforms</u> |
| 2.5 | Trisodium salt of n-hydroxyethylethylenediaminetriacetic acid | <u>Conforms</u> |
| 2.6 | Sodium Gluconate content | <u>Conforms</u> |
| 2.7 | Phosphorus and Silica content | <u>Conforms</u> |
| 2.8 | Foaming Characteristics | <u>Conforms</u> |

Respectfully submitted,



Patricia D. Otero, SMI Inc.