

BONDERITE C-IC 4902

Known as Deoxidizer 4902
November 2016

PRODUCT DESCRIPTION

BONDERITE C-IC 4902 provides the following product characteristics:

Technology	Metal Cleaning
Product Type	Acid Cleaner
Application	Spray and Immersion
Process Components	BONDERITE C-IC 4902 BONDERITE C-IC 4902 R

A solution of the BONDERITE C-IC 4902 removes oxides and alkali residues of former alkaline degreasing or etching processes on aluminum and its alloys.

BONDERITE C-IC 4902 is used in an immersion and spray process.

DIRECTION OF USE

Preliminary Statement:

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

Bath Make-up:

- For the preparation of 1,000 L of the BONDERITE C-IC 4902 solution add to 500 L of water under stirring 5 to 30 kg or 4.5 to 27 L of BONDERITE C-IC 4902.
- After complete dissolution fill up with water to 1,000 L.

Operating Parameters:

Free Acid Points	2.5 to 15
Temperature	20 to 55 °C
Time	3 sec to 10 min

Process Steps:

1. Clean/ Pickle
2. Rinse
3. Deoxidize with BONDERITE C-IC 4902
4. Rinse
5. Chromate, Anodize
6. Rinse
7. Rinse with DI-water
8. Dry

Bath Control:

BONDERITE C-IC 4902 bath is controlled by a titration of the free acid-points.

Titration

- Pipette 10 mL sample of the BONDERITE C-IC 4902 bath into a flask and dilute with 50 mL of distilled water.
- Add 4 to 5 drops of indicator 4.5 (Mortimer).
- Titrate against 0.1 N caustic solution until the color changes from red to turquoise.
- Record the number of mL of 0.1 N caustic solution used as free acid-points.

Bath Replenishing

The bath should be kept within 2.5 to 15 free acid-points.

Add 2 kg or 1.8 L of BONDERITE C-IC 4902 per 1,000 L of the bath for each free acid-point lacking or 1.9 kg or 1.7 L of BONDERITE C-IC 4902 R.

BONDERITE C-IC 4902 R is preferably used in plant with low drag-out and/or high production rates.

Remarks:

The tank material containing BONDERITE C-IC 4902 should be made out of rigid PVC (free of plasticizer), PP or austenitic steel (type 1.4571).

Spraying systems, pumps and heat exchangers have to be made out of stainless steel (type 1.4571).

Plant devices likely to get in contact with the concentrate of BONDERITE C-IC 4902 should be made of rigid PVC, PP or another plastic resistant against fluorides.

BONDERITE C-IC 4902 bath as well as its rinsing solutions are not to be discharged into the public sewage system without prior detoxification and neutralization.

Particular Cautions:

BONDERITE C-IC 4902 contains sulphuric acid and fluorides.

Wear:

- Eye goggles
 - Rubber gloves
 - Acid resistant wear
- Avoid contact with skin.
Provide air circulation.

Equipment:

Pipette, 10 mL
Erlenmeyer flask, 300 mL
Graduated cylinder, 50 mL content
Burette, 25 mL
DI-water
Indicator 4.5 (Mortimer)
Caustic solution, 0.1 N

Storage

Process Component	Recommended Storage Temperature, °C	Shelf life, months (in unopened original packaging)
BONDERITE C-IC 4902	-9.9 to 40	36
BONDERITE C-IC 4902 R	-9.9 to 40	36

Classification

Please refer to the corresponding **Material Safety Data Sheets** for details on:

Hazards identification
Transport information
Regulatory information

ADDITIONAL INFORMATION**Disclaimer****Note:**

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