



INDUSTRIAL COATINGS

(PT52921-10)

CORROSOL 52921

HEAVY DUTY DERUSTER / DESCALER

PRODUCT DESCRIPTION



PRODUCT ADVANTAGES

- Helps strip rust and paint in one operation
- Can be used for quick cleaning of titanium
- Highly effective as a remover of metallic oxides and heat scales
- Can be used on high strength or high heat resistant alloys
- No hydrogen embrittlement
- Used for both spray and immersion operations

CORROSOL 52921 is a liquid blend of caustic and chelating agents. It is used for the removal of carbon deposits, complex metallic oxides, and heat scales. It helps condition adhered scale for more complete removal in subsequent processes, such as scale oxidation in an alkaline permanganate bath and scale removal in an acid bath. It is also excellent for the removal of rust, heat treat stains, and for paint stripping of many types of paints.

TECHNICAL PROPERTIES



Composition: Liquid
 Appearance: Clear, light straw

Odor: Mild
 Specific Gravity: 1.42
 Pound per Gallon: 11.85

Flash Point: N/A
 Foaming Tendency: Low
 Recommended Diluent: Water

Behavior in Hard Water: Good
 Rinsability: Good
 Biodegradable Surfactants: N/A

Recommended Concentration: Imm: 10-15%
 Spray: 5-10%
 Recommended Temperatures: Imm: 180°F-200°F
 Spray: 180°F

pH (concentrate): 13.5
 pH (working solution): N/A

CORROSOL 52921

USE & CONTROL INSTRUCTIONS:

Operating Properties (Typical):

- Application: Immersion or spray
- Operating Concentration: Immersion: 10-15%/volume
Spray: 5-10%/volume
- Operating temperature: Immersion: 180°F-200°F
Spray: 180°F
- Operating time: Immersion: 20-60 minutes
Spray: 5-30 minutes

Specific process conditions may warrant operating the above parameters outside of the typical ranges. Please consult your PPG representative.

Charge Instructions:

Add 5-15 gallons of **CORROSOL 52921** per 100 gallons tank volume.

Charge Details:

- 1) Fill the clean tank to approximately $\frac{3}{4}$ full of the operating solution with fresh water.
- 2) Slowly add 5-15 gallons of **CORROSOL 52921** for every 100 gallons of bath volume.
- 3) Fill the tank to the operating level with fresh water.
- 4) Heat to operating range and analyze.
- 5) Make any concentration adjustments required and begin processing parts.

Analysis Procedures:

CAUTION: DO NOT PIPETTE BY MOUTH!

Free Alkalinity:

Equipment needed:

- 250-ml flask or beaker
- Burette Assembly
- 10-ml pipette and bulb

Reagents needed:

- Phenolphthalein Indicator
- 1.0N Sulfuric Acid

For ordering information, please refer to the Reagent Reference list available from your PPG representative.

CORROSOL 52921

USE & CONTROL INSTRUCTIONS (continued):

Procedure:

1. Place 10 ml of the operating **CORROSOL 52921** bath into the flask or beaker.
2. Add 3-5 drops of Phenolphthalein indicator.
3. Titrate using 1.0N Sulfuric Acid until the solution goes from pink to colorless.
4. Record the number of ml of 1.0N Sulfuric Acid as the Free Alkalinity.

Direct Concentration Calculation:

Ml of 1.0N Sulfuric Acid used X 1.0 = conversion to percent concentration of **CORROSOL 52921**.

Free Alkalinity (ml of 1.0N Sulfuric Acid)	Concentration of CORROSOL 52921
5	5%
6	6%
7	7%
8	8%
9	9%
10	10%
11	11%
12	12%
13	13%
14	14%
15	15%

Comments:

- **DO NOT use on soft metals such as zinc, aluminum or copper or their alloys, as etching will occur.**
- For paint stripping applications, use as indicated above but include a pressure rinse after the paint stripping application for best results.
- Titanium can be quick cleaned in the above solution with immersion time limited to 1-4 minutes.
- Soiled parts should be pre-cleaned before being treated with **CORROSOL 52921**.

USE & CONTROL INSTRUCTIONS (continued):

CORROSOL 52921 Replenishment:

To raise the concentration of **CORROSOL 52921** by one point, add 1 gallon of product to each 100 gallons of tank volume.

Equipment:

All tanks and equipment may be constructed of mild steel.

PRECAUTIONS:

Consult the most recent *Material Safety Data Sheets* for health and safety information relative to the safe handling and storage of this material, and all reagents and indicators used to control this material.

Emergency 24 hour CHEMTREC number: 800.424.9300