



INDUSTRIAL COATINGS

52921

# CORROSOL 52921

## PRETREATMENT TECHNICAL DATA SHEET

### HEAVY DUTY DERUSTER / DESCALER

#### PRODUCT DESCRIPTION

**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

#### TECHNICAL PROPERTIES

Composition:	Liquid
Appearance:	Clear Light Straw
Recommended Concentrations:	See Use & Control Instructions
Recommended Temperatures:	See Use & Control Instructions

#### 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
- Excellent for the removal of rust, heat treat stains, and for paint stripping of many types of paints.

FEB12/REV5

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### 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

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### 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 includes 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**.

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### **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.

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#### **TECHNICAL DATA SHEET DISCLAIMER—INDUSTRIAL COATINGS:**

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