Cor-Ban® 50 Instruction Manual

Safety Steps and Procedures To Follow Prior To Applying Cor-Ban® 50:

Always refer to the **safety data sheet (SDS)**, **technical data sheet (TDS)**, and **label** prior to applying **Cor-Ban® 50** if you have any questions about this product.

Always wear gloves, protective clothing, and eyewear to prevent **Cor-Ban® 50** from making contact with the skin and eyes.

Make sure there is proper ventilation in the area where **Cor-Ban® 50** will be applied and wear a proper mask to prevent the inhalation of fumes from **Cor-Ban® 50**.

Make sure there are no sparks, open flames, or other combustion sources in the area where **Cor-Ban® 50** will be applied.

Cure sealants to recommendations set by the manufacturer prior to applying **Cor-Ban® 50**.

Vacuum and wipe surfaces so that moisture and other foreign material that is on them.

Clean surfaces with the following aliphatic naphtha based wipe solvents, such as **Sur-Prep® 3160**, **Sur-Prep® 3167**, and **D-5640NS/ZC-640**.

Have lighting equipment to see where **Cor-Ban® 50** is being applied and to inspect areas for contamination and rework prior to applying **Cor-Ban® 50**

Do not use Isopropyl alcohol and acetone to wipe and clean the surface.



If the sprayed form of **Cor-Ban® 50** shows fisheyes, separations, or anything that prevents it from being homogeneous and free of voids, then the surface is not clean and needs to be vacuumed and/or wiped again.

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Areas To Mask Prior To Applying Cor-Ban® 50:

Mask areas that will not to be coated, such as:

* Electrical Connectors
* Pins In Sliding Surface Contact
* Joints In Sliding Surface Contact
* Control Cables
* Pulley and Quadrant Cable Grooves
* Bushing and Bearings For All Types, which includes lined Teflon
* Silicone or Rubber Seals
* High Temperature Areas
* Wire Bundles
* Lubricated Surfaces
* Drain Valves
* Oxygen System Components (i.e. Bottles, Pressure Metering and Indicating Equipment and Connections)



Cor-Ban® 50 Product Information and Benefits:

Cor-Ban® 50 is a dark brown, thixotropic liquid corrosion inhibiting compound intended for heavy duty use and is a solvent cut-back formulation which dries in approximately **two hours**.

Cor-Ban® 50 forms a firm, amber, transparent film which will not flow below **175°F (79°C)**.

Cor-Ban® 50 is free of chromates and heavy metals, has a low toxicity level, and is non-corrosive.

Cor-Ban® 50 protects painted and unpainted metal surfaces and wets the surfaces of most commonly used metals.

Areas Where Cor-Ban® 50 Should Be Applied:

Cor-Ban® 50 can be applied on metals including painted and unpainted metal surfaces.

Pretreating Areas Prior To Cor-Ban® 50 Application:

For areas requiring penetration, pretreat areas with **Cor-Ban® 35** and then cover with **Cor-Ban® 50**.



ZIP® CHEM Part of ADDEV MATERIALS

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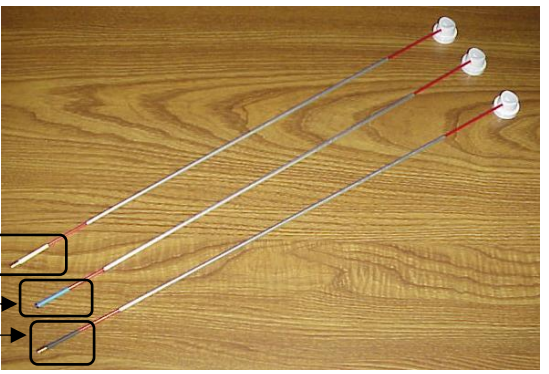
Methods For Applying Cor-Ban® 50:

Use the following equipment for applying **Cor-Ban® 50** in the temperature range of **50˚F to 100˚F (10˚C to 38˚C)**.

*Dipping Application
*HVLP Guns
*Airless Spray Equipment
*Aerosol
***Formit®** Extension Wands-For use with all **Zip-Chem®** aerosols to reach difficult to access areas, such as stringer edges.
*Other Spray Equipment
***Zip-Chem® Aerosol Trigger Sprayer** for use with any **Zip-Chem®** aerosol can
*Dipping
*Brushing
*Please reach out to a **Zip-Chem®** application expert for tips on how to properly apply **Cor-Ban® 50**

HLVP Gun





***Formit® 360˚ Spray (White Tube) Wand**
***Formit® Fan Spray Spray (Blue Tube) Wand**
***Formit® 180˚ Spray (Black Tube) Wands**

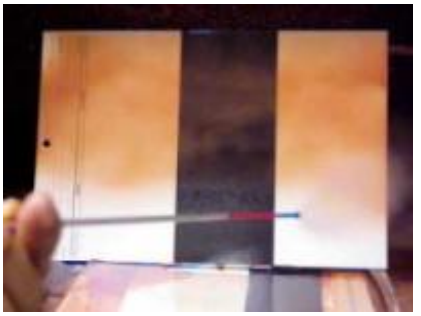
Zip-Chem® Aerosol Trigger Sprayer



Formit® 360˚ Spray Demonstration Video



Formit® Fan Spray Demonstration Video



Formit® 180˚ Spray Demonstration Video



Cor-Ban® 50 Instruction Manual

Methods For Applying Cor-Ban® 50 (Continued From Page 3):

1.) HVLP Spray Gun Setup

HVLP Spray Gun



A.) Determine the tip size for the gun. The recommended tip size for the gun should be **1.0 mm to 1.5 mm**.

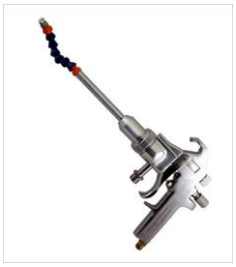
B.) Set the **air pressure**. This is very important because **Cor-Ban® 50** is applied **thin** so **too much pressure** will result in a **dry spray** and texture of **Cor-Ban® 50** while **too little pressure** will result in a **poor atomization** and **orange peeling** of **Cor-Ban® 50**.

C.) If you see texture in the spray of **Cor-Ban® 50**, then increase the **air pressure** of your **HVLP gun**. If you see an **overspray cloud** of **Cor-Ban® 50**, then decrease the **air pressure** slightly. The proper spray pattern for **Cor-Ban® 50** should be a **slightly wet pass** with **no flooding or sagging** because **thinly applied products** like **Cor-Ban® 50** can run very fast.

D.) One pattern that should be used when using the **HVLP gun** to apply **Cor-Ban® 50** is the **fan pattern** because it uses a **full wide fan spray** which provides better consistency and leveling when applying **Cor-Ban® 50** with the **HVLP spray guns**.

E.) The **air pressure** when the trigger is pulled for the gun should be **20–30 PSI** even though most guns specify **10 PSI** at the **air cap**.

Airverter HVLP Spray Gun



F.) Always set the pressure with the **trigger fully pulled** because the **pressure** drops **under flow**.

G.) Close off the **air** and **fluid adjustment knobs**.

H.) Slowly open the **air adjustment knob** with the **trigger** pulled.

I.) Open the **fluid adjustment knob** slowly until you see a **fine mist** from the **air cap**.

J.) Continue to fine tune the settings until the desired spray pattern is achieved.

2.) Air Assisted Spray Gun Setup

Air Assisted Spray Gun



A.) Determine the tip size for the gun. The recommended tip size for the gun should be **1.0 mm to 1.5 mm**.

B.) For **pressure settings**, use the **lowest pressure** possible so that **Cor-Ban® 50** can be spray applied as a **clean fan** with the width of the spray being shaped like **a fan**.

C.) Slowly increase the **pressure** to the gun until the **fan spray pattern** of **Cor-Ban® 50** is fully developed and even and there are no **fingers** or **tails** on the edges of the spray equipment. If you hear a **harsh hissing noise** or see **fogging** in the spraying of the **Cor-Ban® 50**, then the **pressure** of the **air assisted spray gun** is **too high**. None of these observations should occur because **thin materials** like **Cor-Ban® 50 atomize** very easily.

D.) Set the **pump ratio** of the equipment to a range of **20:1 to 30:1**.

E.) Setup the following parts for the **airless spray equipment** below.
***Displacement Pump With A Positive Piston Type**
***Stainless Steel Filter With A High Pressure With 200-300 mesh element**

Cor-Ban® 50 Instruction Manual

Methods For Applying Cor-Ban® 50 (Continued From Page 4):

Air Assisted Spray Gun Setup (Continued From Page 4)

F.) Maintain your distance of the gun from the surface as the distances between **air assisted spray guns** and other spray methods can vary. A good distance to follow for **air assisted spray guns** is about **12" or more**. If you spray apply **Cor-Ban® 50** at a distance closer than **12"**, then there will be a heavy buildup of **Cor-Ban® 50**, tiger stripping of material from the surface where the **Cor-Ban® 50** was applied, and a variation in the gloss of the **Cor-Ban® 50**.

G.) Consider the passing speed of **Cor-Ban® 50** because the output of **Cor-Ban® 50** from **air assisted spray guns** can vary between other spray methods. Therefore, you may need to move faster or slower than other spray methods, such as **HVLP guns**.

H.) The **Cor-Ban® 50** should be spray applied as a **smooth continual pass** with a **50% overlap**.

3.) Airless Spray Setup

Airless Spray Equipment



A.) Determine the tip size for the gun. The recommended tip size for the gun should be **1.0 mm to 1.5 mm**.

B.) For **pressure settings**, use the **lowest pressure** possible so that **Cor-Ban® 50** can be spray applied as a **clean fan** with the width of the spray being shaped like **a fan**. The setup of **airless spray equipment** varies based on the size and type of gun that is being used but a good starting point for the **pressure** of the **airless spray gun** should be around **900-1200 PSI**.

C.) Slowly increase the **pressure** to the gun until the **fan spray** pattern of **Cor-Ban® 50** is fully developed and even and there are no **fingers** or **tails** on the edges of the spray equipment. If you hear a **harsh hissing noise** or see **fogging** in the spraying of the **Cor-Ban® 50**, then the **pressure** of the **airless spray gun** is **too high**. None of these observations should occur because thin materials like **Cor-Ban® 50** atomize very easily.

D.) Set the **pump ratio** of the equipment to a range of **20:1 to 30:1**.

E.) Setup the following parts for the **airless spray equipment** below.
***Displacement Pump With A Positive Piston Type**
***Stainless Steel Filter With A High Pressure With 200-300 mesh element**

F.) Maintain your distance of the gun from the surface as the distances between **airless spray guns** and other spray methods can vary. A good distance to follow for **airless spray guns** is about **12" or more**. If you spray apply **Cor-Ban® 50** at a distance closer than **12"**, then there will be a heavy buildup of **Cor-Ban® 50**, tiger stripping of material from the surface where the **Cor-Ban® 50** was applied, and a variation in the gloss of the **Cor-Ban® 50**.

G.) Consider the passing speed of **Cor-Ban® 50** because the output of **Cor-Ban® 50** from **airless spray guns** can vary between other spray methods. Therefore, you may need to move faster or slower than other spray methods, such as **HVLP guns**.

H.) The **Cor-Ban® 50** should be spray applied as a **smooth continual pass** with a **50% overlap**.

Cor-Ban® 50 Instruction Manual

Methods For Applying Cor-Ban® 50 (Continued From Page 5):

4.) Cor-Ban® 50 5 Gallon (18.9 Liter) Cart Sprayer Setup

5 Gallon Cart Sprayer



A.) Determine the tip size for the gun. The recommended tip size for the gun should be **1.0 mm to 1.5 mm**.

B.) For **pressure settings**, use the **lowest pressure** possible so that **Cor-Ban® 50** can be spray applied as a **clean fan** with the width of the spray being shaped like **a fan**. The setup of **airless spray equipment** varies based on the size and type of gun that is being used but a good starting point for the **pressure** of the **airless spray gun** should be around **900-1200 PSI**.

C.) Slowly increase the **pressure** to the gun until the **fan spray** pattern of **Cor-Ban® 50** is fully developed and even and there are no **fingers** or **tails** on the edges of the spray equipment. If you hear a **harsh hissing noise** or see **fogging** in the spraying of the **Cor-Ban® 50**, then the **pressure** of the **airless spray gun** is **too high**. None of these observations should occur because thin materials like **Cor-Ban® 50** atomize very easily.

D.) Set the **pump ratio** of the equipment to a range of **20:1 to 30:1**.

E.) Setup the following parts for the **airless spray equipment** below.
***Displacement Pump With A Positive Piston Type**
***Stainless Steel Filter With A High Pressure With 200-300 mesh element**

F.) Maintain your distance of the gun from the surface as the distances between **airless spray guns** and other spray methods can vary. A good distance to follow for **airless spray guns** is about **12" or more**. If you spray apply **Cor-Ban® 50** at a distance closer than **12"**, then there will be a heavy buildup of **Cor-Ban® 50**, tiger stripping of material from the surface where the **Cor-Ban® 50** was applied, and a variation in the gloss of the **Cor-Ban® 50**.

G.) Consider the passing speed of **Cor-Ban® 50** because the output of **Cor-Ban® 50** from **airless spray guns** can vary between other spray methods. Therefore, you may need to move faster or slower than other spray methods, such as **HVLP guns**.

H.) The **Cor-Ban® 50** should be spray applied as a **smooth continual pass** with a **50% overlap**.

5.) Electro-Static Spray Gun Setup

Electro-Static Spray Gun



A.) Minimize the flow of **Cor-Ban® 50** for the required **coating speed** and **film thickness**.

B.) Minimizing the target distance of spraying **Cor-Ban® 50**.

C.) Ensure that the **Cor-Ban® 50** to be sprayed has a very high **resistivity** of at least **>1 mega-ohm**.

D.) Attach charging unit to the gun and object to be sprayed with **Cor-Ban® 50**.

E.) Gradually increase in-line **air pressure** so that the spray provides proper **Cor-Ban® 50** build at the required **coating speed** and ensure that the pressure does not exceed **100 psi**.

F.) Fluid pressure is typically **400-800 psi** so make sure it is set to that **psi range**.

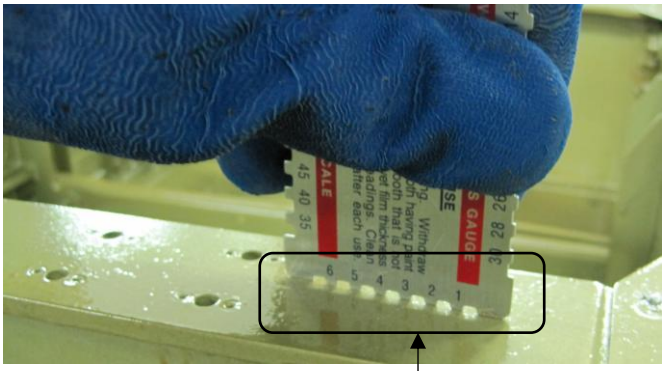
G.) Turn on **charging unit** and begin spraying **Cor-Ban® 50**.

Cor-Ban® 50 Instruction Manual

Coverage For Cor-Ban® 50 and Measuring Film Thickness:

A **gallon** of **Cor-Ban® 50** will cover approximately **800 square feet (74.3 m²)** at a **film thickness** of **1 mil (25 microns)** thick and **one aerosol** of **Cor-Ban® 50** covers approximately **95 ft² (8.8 m²)**. To measure the wet film thickness of **Cor-Ban® 50**, use protection for your hand so that you can push **Zip-Chem®** 's **Wet Film Thickness Gauge** as shown below into the **Cor-Ban® 50** material via hand after the **Cor-Ban® 50** has been allowed to flow for a **few minutes**.





The **thickness** of the **Cor-Ban® 50** can be determined by the **visible tracks** in the wet film that are left by the **gauge fingers** of the **Wet Film Thickness Gauge**. The **dry film thickness** of **Cor-Ban® 50** may be verified using **paint thickness instruments**.

Cor-Ban® 50 Product Pictures, Zip-Chem® Product Packaging Part Numbers, and Other Materials To Purchase:

Cor-Ban® 50
- *16 fl oz (473 mL) Aerosol-**007896**
- *Case of 4 of Gallon (4 each of 8.8 Liter) Cans-**009411**
- *5 Gallon (18.9 Liter) Pails-**007872**
- *55 Gallon (208 Liter) Drums-**007873**
- *Specialized forms of packaging available upon request

Cor-Ban® 35
- *Case of 12 of 16 fl oz (473 mL) Aerosols-004675
- *Case of 12 of 8 oz (227 gram) Brush In Cap (010884)
- *Case of 12 each Quart (946 mL) (009408)
- *Case of 4 each Gallon (4 each of 8.8 Liter) Cans (009409)
- *5 Gallon (18.9 Liter) Pail (002104)
- *55 Gallon (208 Liter) Drum (002105)
- *Special packaging upon request

D-5640NS/ZC-640
- *Case of 12 of 16 fl oz (473 mL) Aerosols **(D-5640NS)-002070**
- *Case of 4 each Gallon (4 each of 8.8 Liter) Cans **(ZC-640)-009430**
- *5 Gallon (18.9 Liter) Pails **(ZC-640)-002155**
- *55 Gallon (208 Liter) Drum **(ZC-640)-008181**
- *Special forms of packaging available upon request **(ZC-640)**

Proper Mask	Ventilating Equipment	Protective Clothing

Sur-Prep® 3160
- *Case of 12 of 16 fl oz (473 mL) Aerosols-**010938**
- *Case of 4 each Gallon (4 each of 8.8 Liter) Cans-**008578**
- *5 Gallon (18.9 Liter) Pails-**008579**
- *55 Gallon (208 Liter) Drum-**008580**
- *Case of 6 Canisters of Towelettes-**100026**
- *Case of 100 Individual Towelettes-**011844**
- *Specialized forms of packaging upon request

Sur-Prep® 3167
- *Case of 12 of 16 fl oz (473 mL) Aerosols-**103765**
- *Case of 4 each Gallon (4 each of 8.8 Liter) Cans-**103762**
- *5 Gallon (18.9 Liter) Pails-**103763**
- *55 Gallon (208 Liter) Drum-**103764**
- *Specialized forms of packaging available upon request

Zip-Chem® Aerosol Trigger Sprayer
- ***010040**

Wet Film Thickness Gauge
- ***100266**

Masking Tape	Tin Foil	Gloves	Protective Eyewear	Vacuum

Aliphatic Naphtha Based Wipe Solvents or Equivalents	Spray Equipment

Part of ADDEV MATERIALS

Cor-Ban® 50 Instruction Manual

Cor-Ban® 50 Product Pictures, Zip-Chem® Product Packaging Part Numbers, and Other Materials To Purchase (Continued From Page 7):

Paint Thickness Instruments	Curing Materials and Devices	Lighting Equipment	Brushing Devices	Dipping Equipment

Cloths, Rags, Towels, and Other Proper Wiping Devices	Spill Containment Vessels and Other Proper Devices For Collecting Material Spills and Overruns

Formit® Wands (12 Assemblies Per Package)

- ***Formit®-18-Fan-006224**
- ***Formit®-18-180-006226**
- ***Formit®-18-360-006227**
- ***Formit®-18-STD-FOG-008352**
- ***Formit®-18-90-FOG-008353**
- ***Formit®-29-360-101321**
- ***Formit®-36-360-009131**
- ***Formit®-48-360** with metal sleeve-**009132**
- ***Formit®-48-360** without metal sleeve-**100424**
- ***Formit®-48-Fan-008460**
- ***Formit®** Sample Pack (3 each of **Formit®-18-Fan**, **Formit®-18-180**, **Formit®-18-360**, **Formit®-18-STD-FOG-100107**)



← 1 Gallon (3.8 Liter) Cans



← 16 Fluid Ounce (473 mL) Aerosol

Cor-Ban® 35 NSN's: 6850-01-492-2932, 8030-01-531-7358 (16 fl oz (473 mL) Aerosols); 8030-01-531-7360 (5 Gallons (18.9 Liter)) 8030-01-615-4737 (Quart (946 mL)); 8030-01-615-4733 (8 oz (227 gram) Brush In Cap)

Sur-Prep® 3160 NSN: 6850-01-633-9843 (16 fl oz (473 mL) Aerosol)

D-5640NS NSN: 8030-01-597-6958 (16 fl oz (473 mL) Aerosol)

Formit® NSN's: 4730-01-612-9914, 4730-01-661-8773 (**Formit®-18-Fan**); 6850-01-492-2942 (**Formit®-18-360**); 4730-01-632-0156 (**Formit®-18-STD-FOG**); 1560-01-658-8943 (**with metal sleeve**), 4730-01-659-5461 (**without metal sleeve**) (**Formit®-48-360**), 4730-01-632-0157 (**Formit®-48-Fan**)

For application questions regarding **Cor-Ban® 50**, contact **Zip-Chem® Aviation Products** at **(1) 408 782 2335** or **zipchem@addevmaterials.com**.

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