

bp-cor

Stop bath for COR-TEN steel

**TECHNICAL DATASHEET** 

# TECHNICAL DATASHEET Stop bath bp-COR

bp-COR is an acrylic sealant (water based) that stops the oxidation process taking place on COR-TEN steel and other ferrous materials, while creating a coating that protects and prevents deterioration of the oxide layer.

For pieces of iron and COR-TEN steel that are always going to be situated indoors, the *bp-COR* coat can be complemented with our protective varnishes (*bz-COR* and *bz-COR* natural matt interior varnishes). They give a very special finish to the surface, but for objects situated outdoors, *bp-COR* is an intermediate step before varnishing and will prolong resistance against atmospheric agents. However, as you will see, there is also the possibility of *bp-COR* being the final layer.

**IMPORTANT:** Before using this product, stir the bottle well to mix the liquid, as during storage, the active particles can sink to the bottom.

This product must be kept out of the reach of children at all times.

### **HOW TO USE**

Before applying, check the surface that you are going to treat to ensure there are no traces of oxide dust. If there are, remove them using compressed air or another method that does not result in the surface becoming greasy or dirty. You can also wash the surface once it has been oxidized, spraying water over it with a hose (not pressurized), and then allow it to dry for 24-48 hours; this will facilitate greater adhesion to the oxide.

Having applied the product and when it is dry to the touch, you can force a natural weathered look by wetting and drying the surface several times. You will achieve a natural appearance and any remaining small particles of rust will be washed away as it has a gradual drying process.

# PROCEDURE ONE: Using bp-cor prior to VARNISHES being applied

Make sure you shake well the *bp-cor* bottle or container before opening it, as well as giving it a good stir at a later stage, to ensure that the product is fully homogenized at all times. Pour the desired quantity into a bucket, mixing it in the ratio of 50% *bp-cor* with 50% water. It is very important to stir it again until the water and *bp-cor* are totally mixed together. For a perfect application and to achieve the best results, we recommend you use a foam roller with a smooth surface and that you chose the right size roller appropriate for the surface area you intend to treat. A turbine gun can also be used for faster application and to give a superior penetration impact on the oxidized surface.

The drying process is quick, although final drying will take some days depending on the ambient humidity and temperature conditions prevailing. In any case, if you want to use a protective varnish after applying <code>bp-COR</code>, we recommend you wait at least 48 hours. It is important to respect this time period even if the surface seems dry to the touch, because it is **ESSENTIAL** that no moisture remains before the varnish is applied.



One coat of stop bath should be applied diluted in water (mixing it in the ratio of 50% *bp-cor* with 50% water) for interior surfaces, when later we won't to apply *bz-cor* or *bz-cor* natural matt varnishes.

For surfaces that are going to be outside we will apply one or two coats also diluted in water at 50% ratio, prior to apply **bz-COR Poliurethane SAT-EX** or **bz-COR Poliurethane glossy** 

# PROCEDURE TWO: Using bp-COR when VARNISHES are NOT going to applied

Make sure you shake well the **bp-COR** bottle or container before opening it, to ensure that the product is completely homogenized. For a perfect application and to achieve the best results, it is recommended you use a roller, ensuring that it is the right size for the surface you intend to treat and / or a turbine gun, for faster application and to give a superior penetration impact on the oxidized surface.

Do not apply to wet or damp surfaces.

Thanks to the latest re-formulation of **bp-COR**, it is now possible to use this product as a final coat (no need for varnishing) on COR-TEN steel that is going to be installed outdoors. In this situation though, **DO NOT DILUTE** the product with water and you need to apply 2-3 coats, depending on whether the piece of steel has been manufactured using the cold or hot-rolling process.

### **APLICATION TEMPERATURE**

For the correct application of the product, an ambient temperature of between 10°C and 30°C is recommended. Below 10°C, the product may cover the surface in an uneven way; you will need to pay more attention to how you spread the product and the condition of the surface. Above 30°C, and also taking into account the surface temperature of the material you are going to treat (for example if it is in direct sunlight), it will be necessary to work in small controllable areas, as the drying speed accelerates considerably due to the temperature of the treated material, and can result in roller marks or surface bubbles that once dry, cannot be eliminated if you do not sand the surface. Given these problems as described above, we therefore recommend you **DO NOT** work outside of the indicated temperature limits, and it is advisable to stay within these limits at all times.

## **STORAGE**

No special conditions for storage are required, but make sure you close the container well and keep it away from direct sunlight, storing it in a cool place. Otherwise the product can lose its properties. We also recommend discarding the product from 1 year of opening the container.

#### **PERFORMANCE**

You should be able to cover around 30-35m2 per litre of product used, based on applying one coat (and diluted with 50% water). If applied undiluted, then around 20-22m2 per litre of product used should be achievable based on a single coat.

#### **NOTE WELL**

Given the nature of the product, you need to take into account several factors at the time of application:



- **1**. The product is a milky liquid that when applied, results in a white film (before it has dried). This is normal; after 90 minutes the product will have dried and it becomes transparent.
- **2**. We do not recommend using stop bath to seal surfaces that do not have an oxide layer. The stop bath adheres to an oxidized related surface due to the fact they both have the same pH. It is for this reason why the sealing and adhesion with the **oct-COR** rust activator is so favourable.

