InhiBlast Usage Instruction Sheet

For best results, we recommend you read this ‘Usage Instruction Sheet’ in its entirety.

Description:

InhiBlast is a wet blasting additive used to prevent flash rust when blasting steel & iron surfaces. In addition to being used as a flash rust inhibitor for **wet blasting**, InhiBlast can also be used to clean the surface & prevent flash rust after **dry abrasive blasting**, **soda blasting**, **hand or power tool cleaning**, & **acid bath rust removal**. Use to remove all contaminants including salts, chlorides, oils, blast residue, & to prevent flash rust for **48-72 hours or often longer (dependent on weather conditions)**.

InhiBlast should be used in conjunction with *’pressure washing’ – *pressure wash after dry abrasive blasting, soda blasting, wet abrasive blasting, dustless blasting, hand tool or power tool cleaning, & acid bath rust removal. Pressure wash can be as low as 500psi, however for best results it is recommended to pressure wash at 1500psi or higher.

When used as per the Usage Instructions, InhiBlast not only prevents flash rust, giving time to apply a protective coating on a totally rust free surface, it also removes all residue, salts, grease & oils, providing a totally clean surface, which can enhance the adhesion & life of any protective coatings that are subsequently applied to the treated surface.

In addition to using InhiBlast on steel & iron surfaces to prevent flash rust, InhiBlast is also highly effective at cleaning concrete, fibreglass, aluminium, stainless steel & other surfaces that requires a clean, salt, residue & oil free surface prior to protective coating application. The addition of InhiBlast on virtually any surface using high pressure cleaning methods can increase the adhesion & life of protective coatings, when applied as per the ‘Usage Instructions’ before applying the protective coating.

*Recommended to pressure wash at 1500psi or higher.

Features:

- Prevents flash rust for approximately 48-72 hours hours, or often much longer with no rain, low humidity, and temperature above 4°C.
- Surface salts including chlorides, sulfates, nitrates, and all other salts are generally undetectable after proper use.
- Can extend the life of most protective coatings applied to the surface after treatment with InhiBlast by providing a rust, salt & residue free surface for the coating to adhere to.
- Completely & immediately soluble in water.
- Non-hazardous to use, non-toxic and non-flammable.
- Virtually odourless.
- Biodegradable, does not persist in the environment..
- Contains no phosphates, silicates, or acids.
- Contains no VOC’s (Volatile Organic Compounds).
- Leaves no residue on the cleaned surface, InhiBlast evaporates with the water in which it is dissolved. The surface can be primed or painted immediately after evaporation.
- Can increase the life of any coating applied to any surface, that has been blasted & then cleaned appropriately according to the usage instructions with InhiBlast before painting. Problems with coatings failing prematurely often occur from underneath the coating due to salt residues, rust, or other contaminants that were left on the surface prior to painting.

- Saves money – surfaces treated with InhiBlast after blasting & prior to coating often require less maintenance due to better coating performance & longer coating life.

Compatibility:

InhiBlast leaves virtually no residue, so is compatible with most major coatings, including acrylics, oil paints, & 2 pack paints & primers.

Surface Suitability:

InhiBlast is not just for use on steel / iron surfaces. In addition to preventing flash rust & removing salt / blast residue on ferrous metal surfaces, InhiBlast can also be used to clean the surface of:

- Galvanised Steel, Aluminium, Stainless Steel
- Concrete, Besser Block, Concrete tiles
- Fiberglass

Use when a clean, salt & residue free surface is required just prior to applying a protective coating. Make certain surface is thoroughly dry before applying the protective coating.

Characteristics:

- Prevents flash rusting of uncovered surfaces and provides a rust-free window of 48 hours or longer with no rain or condensation and temperature above 4°C. Rust-free window for interior storage of InhiBlast -treated surfaces can be significantly longer, dependent on atmospheric moisture.
- It is recommended to prime or paint InhiBlast-treated surface(s) as soon as possible in accordance with the coating manufacturers recommendations after the surface is dry. If there will be a delay in applying the protective coating, it is important to keep the surface dry after treatment.
- Shelf life is 3 years when stored correctly in a cool and dry place.
- Mass density is approximately 1032kg / cubic metre.

Instructions For Use

Wet Blasting – (also called dustless blasting / slurry or vapour blasting):

For best results it is recommended to use InhiBlast diluted in the blast water, with an additional wash-down with InhiBlast after blasting.

Dilute in the blast water/abrasive slurry mix at a ratio of aprox. 1 part InhiBlast to 100 parts water.

After blasting is completed, it is recommended to perform a final wash-down of the surface with a pressure washer with InhiBlast diluted in the pressure washer water, also at a dilution ratio of 1 part InhiBlast to 100 parts water. This will remove all blast residue, salts, chlorides & oils, leaving a rust free, clean surface, ready for applying the protective coating. A minimum pressure wash of 500psi should be used, however for best results 1500psi or higher is recommended. Do NOT rinse the surface after the final application of InhiBlast, it will evaporate with the wash water.

It is recommended to apply undercoat as soon as practical after the surface has completely dried. In cooler weather you can speed up the drying process by using a device such as a leaf blower, or filtered compressed air to blow dry, clean air over the surface. It is also important not to let any water pool in any hollows or crevices on the surface.

After the final wash-down of InhiBlast, & after the surface has dried, it is important to keep the cleaned surface of ferrous metals dry & free of moisture until a protective coating is applied . If the surface gets wet after this, flash rusting may occur.

Dry Blasting / Soda Blasting / Power Tool Cleaning:

After dry abrasive blasting or soda blasting, it is recommended to wash-down the surface with a pressure washer, with InhiBlast diluted in the pressure washer water, at a dilution ratio of 1 part InhiBlast to 50 parts water.
This will remove all blast residue, salts, chlorides & oils, leaving a completely clean surface, ready for applying the protective coating. A minimum pressure wash of 500psi should be used, however for best results 1500psi or higher is recommended. Do NOT rinse the surface after the final application of InhiBlast, it will evaporate with the wash water.

It is recommended to apply undercoat as soon as practical after the surface has completely dried. In cooler weather you can speed up the drying process by using a device such as a leaf blower, or filtered compressed air to blow dry, clean air over the surface. It is also important not to let any water pool in any hollows or crevices on the surface.

After the final wash-down of InhiBlast, & after the surface has dried, it is important to keep the cleaned surface of ferrous metals dry & free of moisture until a protective coating is applied . If the surface gets wet after this, flash rusting may occur.

Acid Bath Rust Removal:

After acid bath rust removal, immediately wash-down the surface with a pressure washer, with BInhiBlast diluted in the pressure washer water, at a dilution ratio of aprox. 1 part InhiBlast to 50 parts water. This will completely neutralise any acid residue, & help to prevent flash rusting from occurring, leaving a clean, rust free surface, ready for applying the protective coating. A minimum pressure wash of 500psi should be used, however for best results 1500psi or higher is recommended. Do NOT rinse the surface after the final application of InhiBlast, it will evaporate with the wash water.

It is recommended to apply undercoat as soon as practical after the surface has completely dried. In cooler weather you can speed up the drying process by using a device such as a leaf blower, or filtered compressed air to blow dry, clean air over the surface. It is also important not to let any water pool in any hollows or crevices on the surface.

After the final wash-down of InhiBlast, & after the surface has dried, it is important to keep the cleaned surface of ferrous metals dry & free of moisture until a protective coating is applied . If the surface gets wet after this, flash rusting may occur.

Important Notes Regarding Usage

- **(wet blasting)** For relatively dry environments, a 100:1 dilution ratio is generally adequate for both the blast cycle, & the wash down cycle. However in high humidity environments with highly contaminated surfaces, a 50:1 dilution ratio may be necessary for both cycles.
- After **dry blasting/soda blasting**, 50:1 dilution is recommended, except in low humidity and low contamination environments, when 100:1 dilution ratio may be adequate.
- **Acid bath flash rust prevention**, again dilute at a ratio between 50:1 & 100:1, depending on the prevailing weather conditions (a dryer climate requires less InhiBlast than a wet or damp climate).
- It is recommended to test at various dilution ratios until all flash rust is eliminated.
- Dust and other contaminants left after dry and wet abrasive blasting must be removed with InhiBlast-treated water. It is recommended to pressure wash with-treated water at sufficient pressure (recommended 1500psi or higher for pressure washer) and flow rates (4 – 10 litres per minute) to effectively dislodge dust and contaminants and prevent flash rusting.
- For degreasing, a 50:1 dilution ratio is generally recommended but a higher concentration (25:1) and possibly increased water pressure may be necessary for heavily contaminated surfaces.
- Do NOT rinse the surface after the final application of InhiBlast, it will evaporate with the wash water.
- If you are using dirty or contaminated water, such as from a bore, well, river, or dam water, it may be necessary to filter the water to remove contaminants before usage. Never use salt or brackish water.
- For best results & performance, see ‘How to correctly apply InhiBlast with a pressure washer:’ below.

How To Correctly Apply InhiBlast with a Pressure Washer

While InhiBlast can effectively be applied at pressures as low as 500psi, for best results it is recommended to use a pressure washer with a pressure of at least 1500psi, & a flow rate of between 4 –10 litres per minute. Refer to the pressure washer specifications for the rated operating pressure & flow rate.

The higher the pressure the better, however more flow rate won't necessarily improve the performance (a lower flow rate is better, because you will use less water, & therefore less InhiBlast). Most off the shelf pressure washers from Bunnings, Mitre 10 etc are capable of producing at least 1500psi.

Whenever possible, & for best results, it is recommended to dilute InhiBlast directly in to the water feeding the pressure washer, so that the rust inhibitor / salt remover additive is applied at the same pressure as the water exiting the pressure washer, rather than using the pressure washer chemical '*injection*' function, which applies the additive at low pressure.

InhiBlast Rust Inhibitor / Salt Remover additive is extremely low foaming, so it shouldn't cause any problems in the pressure washer pump, nor will it cause any corrosion in the pump when used at the recommended dilution ratios.

To do this you will require a separate holding tank, with sufficient capacity & flow rate to feed the pressure washer. An ideal (but not the only) option is to use a clean IBC (Industrial Bulk Container) which can usually be purchased relatively cheaply 2nd hand. If purchasing a used container, make certain the container you are purchasing has not previously contained any harmful or toxic chemicals, oils, or other residue which can clog or harm the pressure washer pump.

You will also need to make certain that you are obtaining sufficient flow rate from the container to feed the pressure washer at its full operating flow rate. If you are not obtaining sufficient flow rate from the container, you can damage the pressure washer. Make certain to use a large diameter, kink free hose from the container to the pressure washer e.g 18 or 25mm hose, not the typical garden variety 12mm hose.

Most pressure waters are capable of suction (drawing water from a tank), however if your pressure washer does NOT have this capability, you may need to use a helper pump to ensure sufficient flow rate. Consult your pressure washer users manual to see if your pressure washer is capable of drawing its own water supply from a tank, without requiring external water pressure.

Make certain that InhiBlast is thoroughly mixed in the holding tank before you start pressure washing. It is recommended to ¼ fill (aprox) the tank with water, then add the required quantity of InhiBlast, then continue to fill the tank at sufficient pressure to create a swirling motion in the tank to ensure it mixes thoroughly.

Eg, for a 1000 liter tank, with InhiBlast diluted at a 100:1 dilution ratio –

1. Fill the tank with aprox 200-250 litres water.
2. Add 10 litres InhiBlast to the tank (1000 litres / 100)
3. Continue filling the tank to 1000 litres at full pressure from the fill hose. Try to create a swirling motion of the water with the hose, to ensure the InhiBlast & water mixes thoroughly. For best results, submerge the hose outlet all the way, so that it fills from the bottom of the tank.

If you cannot create sufficient swirling motion from the hose to mix the product thoroughly, you may need to use another method to create agitation as you fill the tank, such as stirring with a paddle through the tank top.

Any unused InhiBlast / water mixture can be left in the tank for usage next time it is required.

Make certain not to let the tank run dry during use, or you may damage the pressure washer pump. You can calculate the approximate amount of time you can use the pressure washer by dividing the volume of the tank by the maximum pressure washer fow rate. E.g.: if the water volume of the tank is 1000 litres, & the maximum flow rate of the pressure washer (taken from the pressure washer manual) is 6 litres per minute, divide 1000 / 6 = 166. This means you should get around 166 minutes of constant use of the pressure washer before running the tank dry, but to have a margin of safety, subtract 10% from the time to give a maximum of around 150 minutes (2 ½ hours) of constant use.

Precautions

- Water that contains silt (suspended dirt), hard water (high concentration of carbonates and other minerals), industrial or plant water, bore water, river water, lake water and, in some cases, poor quality potable water can affect the performance of InhiBlast. You may need to filter the water before use. Under no circumstances use salt or brackish water.
- Avoid “pooling” of InhiBlast-treated water in hollows or crevices of the treated surface. Excess water should be blown away with dry, clean, filtered & oil-free compressed air, or other mechanical device such as a leaf blower.

Safe Usage, Storage and Packaging

Usage:

- Before use, we recommend that you read the InhiBlast SDS (Safety Data Sheet) before use.
- Do not mix with other chemicals.
- Wear eye & skin protection when handling this product.
- Flush eyes with clean water for 2-4 minutes should contact with InhiBlast occur.
- Wash hands with soap & water after use.
- Inhalation of vapor of undiluted InhiBlast may be harmful to some individuals, especially if you have a respiratory illness or other respiratory related medical condition. In this case it is recommended to use a vapour mask when handling or using this product.
- Seek medical attention if problems occur.
- Keep container sealed tightly when under transport or in storage.

Storage:

- Store at temperatures between >-4°C to <50^{o}C, and away from direct sunlight or heat sources.
- Keep container sealed at all times when not in use.
- Shelf life is aprox 3 years when stored correctly.

Packaging:

- Available in 5kg containers, 20kg cube drums, 210kg drums and 1000kg IBC’s.
- Weight is aprox. 1.032kg per litre.
- Dispose of empty packaging responsibly, & in accordance with local & state regulations. Empty containers are recyclable.

Warranties

To the best of our knowledge, the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact us to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied.

We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products.