



DRF Sealer

General

Fire retardant treatments will considerably improve the reaction to fire properties of wood-based products and the highest fire classifications for combustible products can be reached.

For external applications, fire retardant treated wood needs to be finished with a weather protective coating. A good protective coating will avoid the loss of fire retardant chemicals by leaching in applications like façade claddings and will maintain fire performance over time.

Lots of common weather protective coatings are not suitable to use on fire retardant impregnated wood. The fire retardant chemicals will influence the quality of the coating, leach out and give only a limited protection.

The Innoshield® DRF system (Innoshield DRF Sealer finished with Innoshield DRF XT or Innoshield Ecostain) has been especially developed to guarantee the **Durability of Reaction to Fire** performance.

Product description

DRF Sealer is a special waterbased primer that, in combination with the Innoshield® DRF XT and Ecostain range of semi-transparent and opaque coatings, create a film to protect impregnated, fire retardant chemicals from leaching.

The product binds minerals and provides a good surface for further treatment. DRF Sealer is suitable for interior and exterior applications. DRF Sealer needs to be applied as a prime coat **on all sides** of fire retardant treated, unpainted wood.

Physical data

| | |
|---------------------|--|
| Type | Primer/sealer |
| Basis | PU modified binder based on renewable resources |
| Color | Non-pigmented, clear after drying |
| Viscosity | approx. 23 secs (DIN 53211 #4mm) |
| Dry solid content | 35% |
| Gravity | 1,007 gr/cm ³ |
| Working temperature | 10-30°C (surface temperature) |
| VOC | This product contains max. 3 gr/L VOC and complies with the EU limit (Cat. A/e 130 gr/L) |

Application

General

It is important that FR treated wood needs to be dried back to an appropriate level of 15% and sealed and coated as fast as possible. Inspect the wood for any accumulation of fire retardant salts on the surface. When you observe salt accumulation, remove this by using a soft brush or a damp cloth. If necessary sand the wood lightly.

When dried, fire retardant wood will be stored for some longer time before it's coated with DRF Sealer, make sure the wood is still dry enough to coat and the surface is clean. When dried wood will be covered with plastic sheets, do not cover the air passages on the sides of the pile because air needs to circulate.

Surface preparation

Substrates must be dry and free of dirt, mildew, oil, wax or any other pollution to start the application of DRF Sealer on a sound, clean and dry surface.

Previously treated surfaces

Clean with a suitable detergent. Rinse thoroughly with water. Remove loose paint and loose wood fibres by wire brushing before applying a suitable disinfectant. Substrates treated earlier with linseed oil and stains containing linseed oil must be cleaned down to the bare wood, as linseed oil can cause blister formation.

Do not inhale dust when sanding wood and wear a respiratory protection mask.

DRF Sealer should be always used as a prime coat before applying InnoShield® DRF XT or Innoshield® Ecostain.

Temperature

Between 10° - 30° Celsius, do not coat a warm/hot surface and avoid direct sunlight.

Application data

The consumption of DRF Sealer is related to the moisture content and the absorption properties of the specific wood type.

Average consumption:

sawn wood 85-125 ml/m²

planed wood 70-100 ml/m²

Method of use

Brush, roller, (airless)spray or vacuum coating

DRF Sealer needs to be applied in one coat.

Do not brush across but apply DRF Sealer in the longitudinal direction of the wood. Remember to coat all sides of the wood and give special attention to the end grains (1 coat DRF Sealer + 3 coats of DRF XT or Ecostain wet-on-wet).

After application of DRF Sealer, the wood needs to be treated with DRF XT or Ecostain as the final application. This needs to be done as soon as possible and within 3 months at the latest.

End grains/cut ends

Please handle end grains and/or cut ends with additional care because these parts will be the most critical parts of the board with regard to leaching of fire retardant salts. There handle these with care and apply an extra layer on these ends.

Dilution

This is a protective product, and needs to be used as a ready-to-use product, do not dilute because any dilution will influence the protective properties of the product.

Cleaning

Clean brushes and other application equipment directly after usage with warm water.

Drying time (at 20° C, 60% R.H.)

Drying times are generally related to air circulation, temperature and film thickness and will be affected correspondingly.

Values for orientation:

| | |
|------------------------|------------------|
| Dust dry | Approx. 1 hour |
| Dry to recoat, minimum | Approx. 12 hours |

Surface should be dry and free from any contamination prior to application of the subsequent coat.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not breathe or inhale mist. Avoid skin contact. Wear gloves. Eyes should be well flushed with water and medical advice sought. If swallowed seek immediate medical advice. DRF Sealer contains max. 3 gr/ltr VOC - EU VOC limits (cat. A/e):130 gr/ltr (2010)

Waste management

Empty containers and remaining primer should be taken to a local environmental protection station.

For detailed information on the health and safety hazards and precautions for use of this product, please refer to our MSDS.

Miscellaneous

Packaging sizes - 20 Liter

Remarks

It is recommended to perform a test before the entire surface will be coated. Complaints about aesthetic appearance, are only considered when a test prior to the entire surface application has been set and we are informed about any deficiencies.

DISCLAIMER

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice. Please contact us for any further information.

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