Product Data Sheet

morrells®

xerofire® *HP* Clear

Code	Description	Code	Description
7XBA/801	xerofire *HP* Intumescent Basecoat - Part A	7X*3/457	xerofire Clearcoat
7XBB/401	xerofire *HP* Intumescent Basecoat - Part B	7CAT/457	xerofire Clearcoat Catalyst
7XCL/000	xerofire Cleaner	7X07/457	xerofire Clearcoat Thinners
7XIS/127	xerofire Isolator	7XR/000	xerofire *HP* Basecoat Retarder

Technical Data	A unique range of leading technology, professional woodfinishing products formulated to upgrade (or maintain) the fire-rating of a wide variety of wood-based substrates including veneered panels, solid hard and softwood's, plywood, MDF and wood-composite boards. The xerofire Clearcoat is available in 90, 50, 40, 30, 20 and 10% Sheen levels.
Properties	The xerofire *HP* system comprises of a 2K Waterborne Intumescent Basecoat and a 2K Acid Catalyst Clear Topcoat to provide a high quality and excellent aesthetic furniture grade finish. This system complies with the requirements of Euro Reaction to Fire (EN 13501-1) and has a classification of B-s1,d0. The xerofire *HP* system also achieves the minimum requirements of FIRA Standard 6250 Horizontal Surfaces – Severe Use. This type of finish reaches is full cure cycle 21-28 days after application.
Certification/Accreditation	EN 13501-1: 2007 +A1 :2009 "Euro" Classification B-s1,d0 – Report Number 431720 issued 7th September 2020 by Warringtonfire. **The user should consider the Fire Retardant Accreditation for this product range as a guideline only. The tests conducted encompass the whole finishing system which may comprise additionally of substrate, adhesive, veneer and coating, and not just the coating. Application methods and coating weights are also factors which can influence fire retardancy.** **It is the responsibility of the user to ensure that their specific system/application achieves/maintains the required Fire-Retardant rating.**
Mixing Guidelines	**Xerofire isolator:** Supplied ready for use. This is recommended to avoid potential discoloration, particularly with acid sensitive timbers and fruitwoods such as maple, cherry and ash.

	xerofire Intumescent Basecoat: Due to its acidic nature this material may cause discoloration to certain timbers. Mix 2 Parts of 7XBA/801 with 1 Part of 7XBB/401 by volume as supplied. For best results add Part B slowly into the pack containing Part A and mix thoroughly until homogenous. Allow to rest 10 minutes after mixing before use. Once mixed the blend is ready for use (RFU). Mixed/reacted Xerofire Basecoat has a useable pot-life of 8-10 hours in ambient conditions. In temperatures above 25 degrees C xerofire Basecoat Retarder (7XR/000S) is recommended, added at 2-3% into catalysed xerofire Intumescent Basecoat. This product should not be thinned. In some instances, a slight black tint may be apparent in the 7XBA/801 – this is a natural occurrence and does not affect the colour or performance of the applied coating. **xerofire Clearcoat**: Mix 9 parts Lacquer with 1-part 7CAT/457 by volume. The catalysed lacquer is ready for use (RFU) but can be thinned up to 5% by volume with the recommended thinner, 7X07/457, if required. Under normal conditions these products will have a workable pot-life of 36 hours after catalysis. **Note: Standard AC topcoats must not be used with this system.**
Application Guidance	These products are designed for spray application only. They should only be applied at temperatures > 10°C and with a relative humidity (RH) of < 65%. Recommended settings: Based on either a Sprayshop MX 32:1 or a Kremlin Eos Pump (30:1) the recommended settings for the xerofire Isolator, Intumescent Basecoat and Clearcoat are: Air Pressure: 1.5 – 2Bar Fluid Pressure: 1.5 – 2Bar Tip-Size: 0.9 – 0.11 For automated line applications please contact our Technical Support Team for guidance.
Typical Handling	**Xerofire isolator** Touch dry 1-2 hours @ 18C Sandable 1-2 hours @ 18C.Use 320 grit paper to de-nib. **xerofire *HP* Intumescent Basecoat** Touch Dry: 2 - 3 @ 18°C Sandable: 4 - 6 hours @ 18°C. Use 320 grit paper to de-nib. Recoatable: 4 - 6 hours minimum @ 18°C This product can remain with a residual 'tack' dependent upon environmental conditions, but this will not affect performance. We recommend the use of disposable or cotton gloves whilst handling to avoid unnecessary damage to the finish.

	Xerofire Clear coat Touch Dry: 25 - 30 mins @ 18°C Packing Time: Overnight minimum i.e. at least 24hrs after xerofire Clearcoat has been applied, dependent on conditions. Packing media with contours such as corrugated card or bubble wrap should be avoided on the coated faces of xerofire panels. Morrells recommends a layer of brown packing paper or compressed foam packing sheet is laid uniformly across the whole face of the panel when packing/wrapping
Cleaning	**Xerofire isolator** 2007/100 should be used for equipment cleaning. It is recommended that separate, dedicated spray guns and fluid lines are used for the application of xerofire Basecoat and xerofire isolator to avoid contamination. **xerofire *HP* Intumescent Basecoat** Use water to clean down equipment immediately after use and then flush with xerofire Cleaner, 7XCL/000. xerofire Cleaner should also be used for more thorough cleaning tasks. To clean dried/cured material use X001 - Fast Thinners or 2007/100 - Gun Cleaner. Failing to clean guns and lines after use can lead to irreparable damage. **xerofire Clearcoat** 2007/100 should be used for equipment cleaning. It is recommended that separate, dedicated spray guns and fluid lines are used for the application of xerofire Basecoat and xerofire Clearcoat to avoid contamination.
Coverage	Each pack of material applied at a transfer efficiency of 70% will typically give coverage of: **Xerofire Isolator (5 litres):** 40 m^2 **Xerofire *HP* Intumescent Basecoat (12 litres) :** 60 m^2 **xerofire Clearcoat (5 litres):** 40 m^2 Coverage is dependent upon the size, orientation and surface quality of the item being coated, and the transfer efficiency of the application method/equipment.
Tinting/Staining	Xerofire *HP* base products are not suitable for tinting. The full range Morrells Stains can be used under the xerofire system. A minimum of 2 hour drying at ambient temperature should be allowed before over coating these stains. Using Morrells Classique Range or pigmented stains can cause issues with adhesion, patchiness and impairment of the fire-retardant properties.

System Guidelines	Morrells recommends the following guidance for use of this product range: **Typical Finish:** • It is recommended that all edges are arrised to achieve optimum coating weights. • Ensure there is a minimum operating temperature of 10^0C & a relative humidity < 65%. • Apply 1 coat of xerofire isolator @ 60-70 g/m2 and allow to dry for 1-2 hours. Denib with 320 grit. • Apply 1 coat of mixed/reacted Xerofire *HP* Intumescent Basecoat at 152µ wet film thickness (approximately 180 - 190g/m^2). • Optimum wetting and clearing of xerofire *HP* basecoat is achieved if left out of airflow after application for 30 minutes. • Leave to air dry for 4-6 hours. Optimum temperature is between 18°C and 23°C, however it is recommended that heat (< 35°C) and airflow should be introduced to the panels for 1-2 hours prior to sanding and xerofire topcoat application in order to reduce further moisture. • The basecoat should have a MC of below 20 prior to top coating. • Lightly denib with 320/400 grit paper. • Apply 1 coat xerofire Clearcoat at 76µ wet film thickness (approximately 70g/m^2). No more than 1 topcoat should be applied. • A sealing coat of Xerofire topcoat applied to the rear face and edges is recommended in order to prevent the potential ingress of moisture. • Finished panels that are scribed or have apertures cut out during fit out increase the potential for ingress of moisture. It is recommended that these areas are sealed with brush-applied coats of Morrells Waterborne End Grain Sealer (8ES/000). Using these products in systems outside the recommended guidelines can lead to immediate and latent problems with the integrity of the finish and the end rating of the panel.
Important Information	➢ Designed for spray application. ➢ Xerofire HP Clear is not recommended for vertical application ➢ Users should prepare a test panel prior to commencement and satisfy themselves that the specific system provides the appearance and level of performance appropriate for the end-use prior to undertaking any contract. ➢ Products not recommended in this Product Data Sheet should not be used as part of the xerofire finishing system. ➢ Xerofire Isolator, xerofire *HP* Intumescent Basecoat and xerofire Clearcoat should have nominated, dedicated finishing equipment. ➢ Douse all waste materials associated with this/these materials with water before disposal and avoid prolonged/excessive exposure to heat. ➢ Store all waste materials in secure metal container outside, away from combustible materials overnight. ➢ It is advisable that the suitability of application equipment (guns,

	tip-sizes, pumps etc) and all associated sundries (abrasives, stains, cleaners etc.) should be considered and checked with Morrells Technical Support team when using xerofire finishing systems. ➢ Avoid contact with iron, copper, zinc, aluminum and platinum as these can attack the aqueous polymer. Ensure these metals are not present in finishing equipment used for xerofire *HP* Basecoat. ➢ Morrells do not recommend the mixing of catalysed material with fresh material. Always mix enough for the job. ➢ Under catalysing or over catalysing can cause impairment of cure and cracking. ➢ Excessive coating weights, over-coating too early or excessive denibbing can lead to cracking or lifting. ➢ When coating darker timbers, such as walnut, mahogany or teak, slight bleaching may occur. ➢ Product should be stored above 10°C and protected from frost. xerofire *HP* Intumescent Basecoat and Xerofire Clearcoat should be 'acclimatised' to a minimum of 10°C overnight prior to use for optimum results. ➢ Optimum application is achieved between 15°C and 25°C with good air movement and ventilation. ➢ Finished products coated in the Xerofire system should not be subjected to environments with temperatures of < 10°C and relative humidity of > 60% to avoid ingress of moisture. ➢ Prior to finishing the timber should have a moisture content of 9% +/- 2%. For most timbers the ideal conditions to achieve this moisture content is around 40-60% relative humidity and 17 - 23°C (i.e. average UK home and office conditions). ➢ Out of scope with 2004/42/EC.
Health & Safety	Reference should be made to the appropriate MSDS for this product range, which can be found at www.morrells.co.uk The use of appropriate personal protection equipment (PPE) is recommended. xerofire *HP* Intumescent Basecoat Part A (7XBA/801) is classified as corrosive and so appropriate care should be taken when handling and using it. These products are intended for ***professional use*** only.

The information provided on this information sheet is based on the best of our knowledge and experience, is given in good faith and should only be regarded as recommendations. No guarantee should be inferred and customers are advised to carry out their own tests under local conditions.

For further technical information contact our Technical Support Team on 0161 406 5300.