



DATA SHEET

CHAR 17

WHAT IS CHAR 17

CHAR 17 is a waterborne intumescent clear coating, providing a very effective fire barrier with fast activation at low temperature. When activated by a fire, the thin transparent film develops a coherent char particularly suitable for fire protection of flammable substrates.

CHAR 17 is used for fire protection of wood and other flammable substrates, while preserving their natural appearance.

CHAR17 achieves Euroclass B-s1-d0 on wood-based substrates of 10mm or more.

RECOMMENDED PRIMERS AND TOPCOATS

CHAR 17 **must** be protected with CHAR 17 Finish on the same day as initial application.

Any delay to topcoat application will risk humidity affecting the final finish.

For best results apply with a fine or short pile roller at 50ml per 1m² or 20m² per Litre.

USE AND APPLICATION

CHAR17 is designed for fire protection of wooden structures and panels in interior environments and which are not subjected to strong wear and tear, e.g. beams and columns, boards, studs and joists, decorative panels or walls.

Prepare surface for intumescent by removing existing coatings. Oiled or waxed timber is to be spot-checked prior to application to ensure full adhesion and clarity of final product. Oil/wax must be fully dry in accordance with manufacturer instructions prior to application of CHAR 17.

CHAR 17 base is applied in two coats of 125ml per 1m². Each 1L tin will protect 4m² of timber. Best results are achieved with a fine or small pile roller. Care is to be taken when applying by brush to ensure even application.

CHAR 17 is not to be applied externally or in areas of high humidity.

Wood moisture should be lower than 15% to avoid the risk of formation of white spots. Drying times are strongly dependent on film thickness, ambient temperature and especially ambient moisture.

Temperature should be within 15°C and 35°C, relative humidity should not exceed 70%. Coated surfaces should not be handled by bare hands until fully dried, then top coated to avoid fingerprints.

CERTIFICATIONS & APPROVALS

CHAR 17 achieves a reaction to fire rating; **Euroclass B-s1-d0**.

Available certificates and test reports are in accordance with European fire standards. Reaction to fire test according to EN 13501-1. Classification tests are performed according to EN ISO 11925-2 and EN 13823 on wood particleboard rated according to EN 312-2.

Test report:

Therefore, according to EN 13823 paragraph 5.2 results apply to all types of wood and wood-based substrates and also on all flammable substrates rated A2 or better. This performance is achieved with 300 g/m² active layer. A number of recent cone calorimeter tests have shown excellent fireproofing performance of several polymers including HIPS, unsaturated polyesters, epoxies and others.



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PROPERTIES

CHAR 17 DENSITY: 1.30 ± 0,05 kg/dm³ at 20°C.

SOLIDS CONTENT: 60% ±5%w/w - 75% ±5%v/v.

COLOUR: transparent.

STANDARD PACKING: 1L, 5L, 20L paint tins.

SHELF LIFE: 12 months in original packing and proper environment COATING .

SYSTEM: CHAR 17 is sensitive to moisture. Must be protected with own topcoat CHAR 17 FINISH.

SPREADING RATE: 300g/m² +50 g/m² topcoat.
(theoretical)

APPLICATION: by airless or airmix spray, by roller or brush. NUMBER OF COAT: Typical application: 2 coats x 150 g/m² active layer + 1 coat topcoat.

THINNING: Not recommended If necessary with water max 5% for CHAR17; with synthetic thinner max 5% for CHAR17 FINISH DRYING TIME * 8 hours - touch / 24 hours - complete.

MIN APPL.TEMPERATURE +15°C RH max 60%.

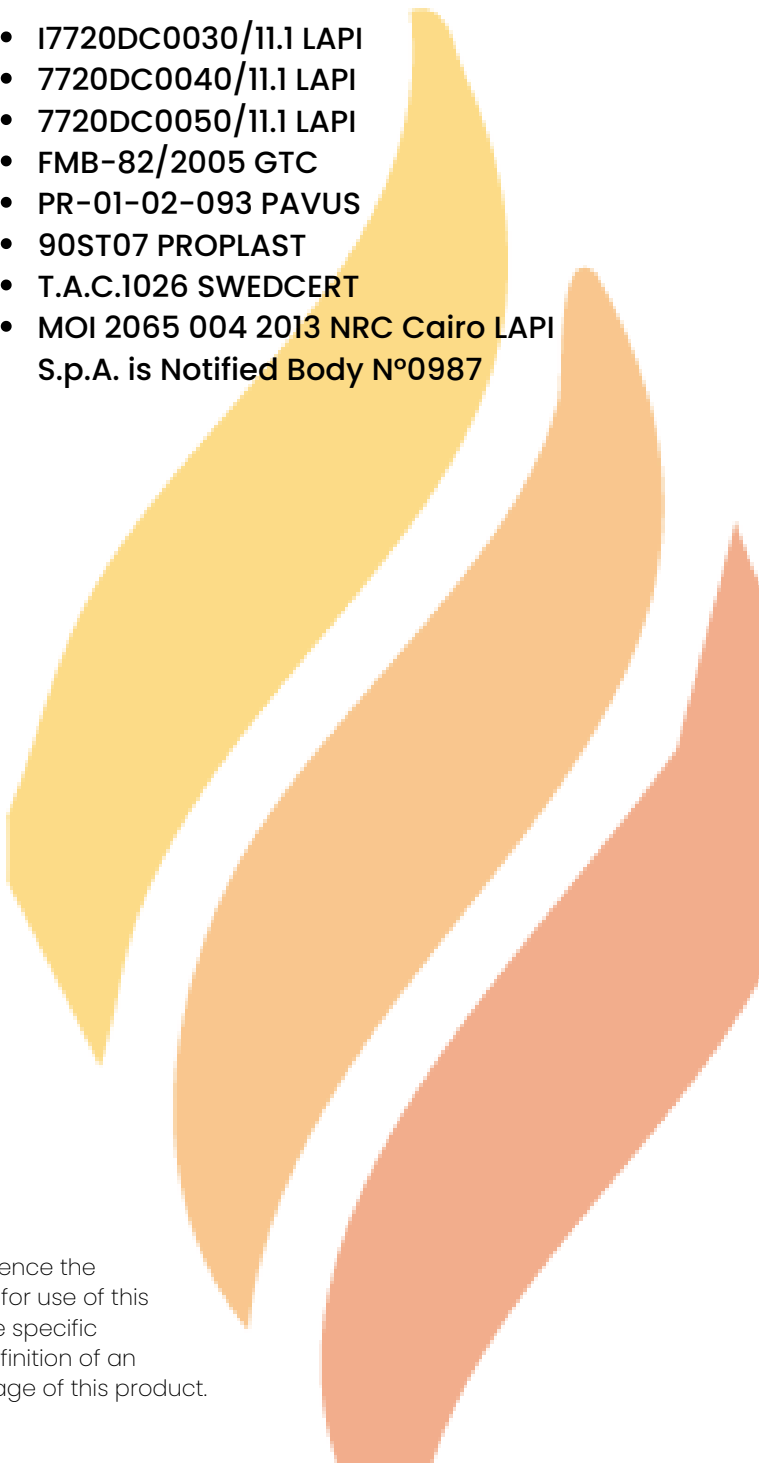
MAX APPL.TEMPERATURE +35°C RH max 70% (*) @ +20°C and 60% RH.

DRYING TIME DEPENDS ON DFT, TEMPERATURE
DEPENDS STRONGLY ON RELATIVE HUMIDITY.



TEST, ASSESSMENT AND CLASSIFICATION REPORTS INCLUDE:

- I7720DC0030/11.1 LAPI
- 7720DC0040/11.1 LAPI
- 7720DC0050/11.1 LAPI
- FMB-82/2005 GTC
- PR-01-02-093 PAVUS
- 90ST07 PROPLAST
- T.A.C.1026 SWEDCERT
- MOI 2065 004 2013 NRC Cairo LAPI
S.p.A. is Notified Body N°0987



DISCLAIMER: Though based on the results of long term testing and experience the information given here is informative only. We cannot accept any liability for use of this information and the product unless a proper check has been done of the specific application, verified by the end-user. Accurate preliminary testing and definition of an application protocol and system is highly advisable to obtain full advantage of this product.