

SELAC B XFC
ULTRAFAST CURING PURE EPOXY

Glossy - Semiglossy - Metallic and tridimensional effects

DESCRIPTION

Selac B XFC are thermosetting powder coatings based on epoxy resins crosslinked with suitable hardeners and designed for the coating of goods for interior use .
Thanks to good aesthetical properties they satisfy severe decorative standards.
Selac B XFC are epoxy based coatings offering to our customers an updated technology finalized to reduce the cost of painting , in which a more and more important factor is represented by the thermal energy necessary to polymerize the product .
Very low curing temperatures or short curing times allow to keep energetic consumption low , resulting in a better productivity , thanks to the higher speed of the conveyor .
For further details please request specific TDS .

GENERAL PROPERTIES

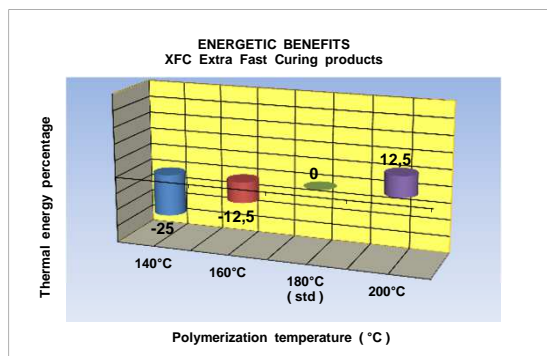
Good mechanical properties
Excellent chemical resistance
Very good corrosion resistance

COLOURS AND EFFECTS

Possibility of a complete colour range
Gloss range from 50 up to 95 gloss
Smooth , orange peel , fine textured ,hammer-finish , arabesque surface finish are possible
Mettallic effects possible in dry-blend or bonded versions
Wide possibility of taylor-made version on demand

ENERGY BENEFITS OF XFC PRODUCTS

The draft expresses the percentage of energy saving possible on a painting line by the use of XFC products instead of standard powders (curing 20' @ 180°C) on the same weight of metal .

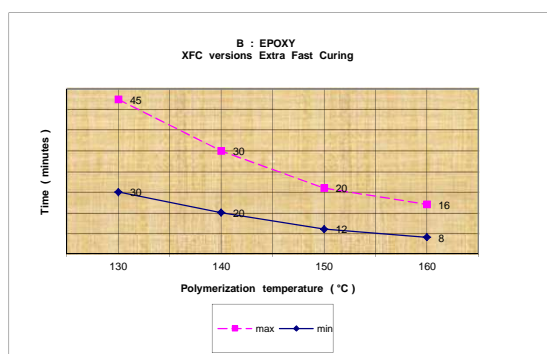


CURING CONDITIONS

Drafts interpretation

To obtain functional and aesthetic properties (colour and brilliance) mentioned in the TDS the curing schedule adopted for the products must be in any point of the draft area comprised between the curves of minimum and maximum .

Times always refer to object temperature (PMT) , being the heating time variable from item to item and from plant to plant .



Minimal conditions (PMT) : 30' @130°C - 20' @ 140°C - 12' @ 150°C - 8' @ 160°C

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SUPPORT PREPARATION

Painting must be done on clean support , free from oil , grease , oxidation , residuals of working , welding and rinsing processes , and any contaminating agent must be avoided .

Iron and steel : iron or zinc salts phosphatization

Aluminium : cromatation or chrome-free pretreatment are recommended

Hot dipping galvanized steel : according with the item adopt mechanical treatment , phosphatization or cromatation process

THICKNESS

Minimal recommended thickness is 60 microns , but in any case the coating layer must completely cover any surface roughness , especially in case of sandblasted supports .

For orange peel products the minimal suggested thickness is 100 micron .

For fine textured products the minimal suggested thickness is 80 micron .

**APPLICATION METHODS
AND RECYCLE**

The application is possible with manual or automatic electrostatic devices , both corona and tribo . Overspray can be recycled in the fresh powder and re-used , but the use of integral recycle is not recommended at all ; do not exceed 25% and maintain a constant feeding of fresh powder .

On metallic products an unproper management of the recycle may result in remarkable variations of the effect , therefore must be evaluated in each single case , with an indicative amount of 10% . Please contact arsonsisi s.p.a.

TECHNICAL FEATURES

Specific gravity : 1,3 to 1,9 g/cc , according colour and formula

Theoretical yield at 60 micron : 13 to 9 sqm/kg , according colour and formula

Brilliance range at 60° : 50 to 95

Average particle size (laser Malvern) : 32 - 45 micron

X99 particle size (laser Malvern) : 95 - 150 micron

***** NOTE : taylor-made particle size distributions
are possible on demand

MECHANICAL PROPERTIES

Test conditions : trials are made on normalized UNI 5961 panels 0,6 mm thick , degreased with solvent , coated with 70 - 80 micron of powder completely cured .
Mentioned results are obtained under controlled lab conditions ; therefore these values are merely indicative and must be verified in the real use conditions under each single user responsibility .

Minimal polymerization conditions (PMT)

30' @ 130°C - 20' @ 140°C - 12' @ 150°C - 8' @ 160°C

Thickness : 70 - 80 micron .

Direct impact : min. 20 Nm (ISO 6272)

Ericksen embossing (ISO 1520) : min. 4 mm

Cylindrical mandrel (ISO 1519/73) : pass 3/16" = 5 mm

Adhesion (ISO 2409) : GT 0/1

Buchholz hardness (ISO 2815) : min. 85

Pencil hardness (ASTM D3363) : H - 2H

CORROSION AND DURABILITY

Test conditions : trials are made on normalized UNI 5961 panels 0,6 mm thick , treated by microcrystalline zinc salts phosphatization , or on aluminium AA 5005-H24 chromated panels , coated with 70 - 80 micron of powder completely cured .

Mentioned results are obtained under controlled lab conditions ; therefore these values are merely indicative and must be verified in the real use conditions under each single user responsibility .

Salt spray test (ISO 3768 / ASTM B117) ; support UNI 5961 steel treated by zinc phosphate

After 500 hours rust penetration at the cross-hatch : max. 4 mm

Humidostatic test (ISO 6270) ; support UNI 5961 steel treated by zinc phosphate

After 1000 hours no film variation

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STORAGE AND STABILITY

Products must be stored in the original sealed packagings , in a cool and dry place and at a temperature not exceeding 30°C .
In these conditions products **SELAC B XFC** are usually stable for a period of 6 months but particular formulations may have different storing life .
Always consult the specific TDS of each single product or contact arsonsisi s.p.a.

RECOMMENDATIONS

These informations are given on the base of our best experience as well as the one of specialized laboratories and they are continuously updated , nevertheless the user has complete responsibility to apply and to experiment the products according its own specific necessities .
This document has the intention to describe and summarize the main properties of arsonsisi products , but in no case it can be considered as a warranty for the products .
Further informations about application of metallic effects , maintenance of goods coated with homologated polyesters or availability of special versions are mentioned in integrative notes .