

SELAC POLYESTERS FOR DECORATIVE USE
SERIES : Y2 ARSONMIX[®] ECO
 Dual-layer system for metallic effects

DESCRIPTION

ARSONMIX[®] ECO is a patented system based on thermosetting powder coatings obtained from carboxylated polyester resins crosslinked with non toxic hardeners . Formulations are exempt from heavy metals as well as from dangerous substances and are especially designed to reach an excellent aesthetic level and a unique metallic effect , impossible to obtain with conventional one-layer products . Polyester chemistry gives a good outdoor resistance . The nine base colours of **ARSONMIX[®] ECO** system offer the possibility to obtain a wide range of metallic colours , by mixing them according the ratios mentioned in the specific **ARSONMIX[®] ECO** portfolio , or according anyone's own necessity until the reaching of desired colour .

COMPLETE COATING CYCLE

ARSONMIX[®] ECO system does not create any salt & pepa effect and final result is very homogeneous and covers very well the substrate . Dosage of the single bases must be very careful and mixing has to be done in a clean , suitable container .

The complete **ARSONMIX[®] ECO** coating process must follow these steps :

- _ Application of the first layer of base (or mix of them)
 (**NOTE** : in this step the colour is not yet the desired)
- _ Curing of the first layer (see following draft)
- _ Overcoating with glossy (Y500X4Z) or semimatt (PP 24-0601) clearcoat , according with desired finish
 Application of the clearcoat must be very careful , with regular thickness on on all the coated surface in order to limitate colour differences
- _ Curing of the topcoat according specific schedules

More detailed informations are available on the specific leaflet .

GENERAL PROPERTIES

Outstanding and very peculiar metallic finish
 Good resistance to ageing in outdoor environments

PRODUCT RANGE

Y2 ARSONMIX[®] ECO

COLOURS AND EFFECTS

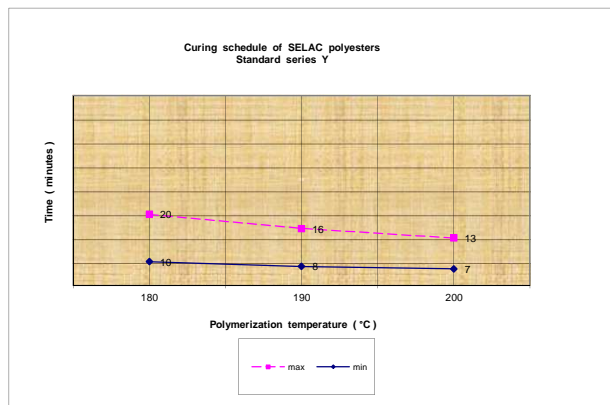
Smooth surface
 Possibility of taylor-made versions on demand

CURING CONDITIONS

Drafts interpretation

To obtain functional , optical and aesthetic properties mentioned in 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)
 10' @ 180°C - 8' @ 190°C - 7' @ 200°C

SELAC POLYESTERS FOR DECORATIVE USE
SERIES : Y2 ARSONMIX[®] ECO

Dual-layer system for metallic effects

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 : chromate or chrome-free pretreatment are recommended
Hot dipping galvanized steel : according with the item adopt mechanical treatment , phosphatization or chromate process .

THICKNESS

For the base layer minimal recommended thickness is 60 micron but in any case coating layer must completely cover any surface roughness , especially in case of sandblasted supports .
The thickness of topcoat must not exceed 80 micron .

APPLICATION METHODS AND RECYCLE

The application is possible with corona electrostatic devices .
Due to the technical peculiarities recuperation of the recycled powder is not recommended ; never exceed 10% and maintain a constant feeding of fresh powder .
Unproper management of the recycle may result in remarkable variations of the effect , therefore it must be optimized case by case .
Please contact arsonsisi s.p.a. and refer to the technical informative note about application of metallic .

TECHNICAL FEATURES

Specific gravity : 1,3 to 1,7 g/cc , according colour and formula
Theoretical yield at 60 micron : 13 to 10 sqm/kg
according colour and formula

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 confirmed in the actual use conditions under the responsibility of each single user .

Minimal polymerization conditions (PMT)

10' @ 180°C - 8' @ 190°C - 7' @ 200°C

Thickness : 70 - 80 micron .

Direct impact : min. 30 Nm (ISO 6272)

Erichsen 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

SELAC POLYESTERS FOR DECORATIVE USE
SERIES : Y2 ARSONMIX[®] ECO
Dual-layer system for metallic effects

**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 AA 5005-H24 chromated aluminium 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 confirmed in the actual use conditions under the responsibility of each single user .

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

Saline-acetic spray test (ISO 9227)

Support UNI 5961 steel treated by zinc phosphate
After 500 hours rust penetration at the cross-hatch : max. 16 mm

Humidostatic test (ISO 6270)

Support UNI 5961 steel treated by zinc phosphate
After 1000 hours no film variation

Exposure in sulphur dioxide according " Kesternich test " (ISO 3231)

After 24 hours no blistering , no colour variation , no gloss variation

Exterior durability

After 12 months of outdoor exposure the coating film shows moderate variations a slight lowering of the brilliance and some slight discoloration are acceptable .

Chemical resistances at room temperature (25+/-3°C)

Generally good versus diluted acids and diluted alkalis
Sufficient versus aromatics , moderate versus ketons and alogenated
The behaviour versus very aggressive or concentrated agents or under different conditions must be verified by the user

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 **ARSONMIX[®] ECO polyesters** are stable for a period of 36 months .

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 the 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 them .
Further informations about application of metallic effects , maintenance of goods coated with homologated polyesters or availability of special versions are mentioned in specific technical integrative notes .