

**GENERALI RECOMMENDATIONS AND ADDITIONAL INFORMATIONS
ABOUT HOMOLOGATED POLYESTERS
SELAC Y51 Y52 Y54 Y57**
DESCRIPTION

Thermosetting powder coatings based on carboxylated polyester resins crosslinked with non-toxic hardeners and exempt from any dangerous substances . These formulations are especially designed to fulfill the highest expectations in terms of colour stability , gloss retention and corrosion resistance required by the architectural market . Their excellent aesthetical properties satisfy the highest decorative standards . The application is possible with corona and tribo electrostatic systems . Codes carrying "C" in fourth position allow application on porous substrates subject to degassing as well as the baking in ovens with direct flame without any discoloration problems .

OPERATIVE CONDITIONS

Formulations adopted make Selac homologated polyesters suitable for a wide range of environmental conditions . Laboratory trials and years of on-field experiences confirm that extended exposures at temperatures between -40°C e +70°C , even in case of relative humidity higher than 50% , do not cause fast alteration of the coating film , neither under aesthetic nor functional point of view , and that ageing remains within the limits that today is technically possible to grant for this type of coatings .

DURATION OF COATING PRODUCT

The duration of any film of coating is depending in the same measure from the quality of the product , from the right preparation of the substrate and from the proper application according with the characteristics of the coating product . To avoid any problem it is fundamental that arsonsisi can have from the user any useful information , in order to define the most suitable product and conditions . regarding materials and substances (e.g. auxiliar products , solvent-based repair coatings , polish waxes , lubricants , glues , detergents etc.) which may enter in contact with the coating during use , assembly , mounting of the coated parts , arsonsisi informs that any agent used during each working phase must have neutral pH , must be chemically inert and must not to attack the coated surfaces . All requirements about specific properties such as abrasion resistance , non sensitivity to specific detergents or chemical agents , special colour stability , etc . must be explicitly given to arsonsisi at the act of request or of the order . Experimental validation of the suitability of any product is always in charge to the user . In some cases to improve performances and to extend duration of the coating it is possible to adopt multilayer systems . Arsonsisi proposes the multilayer systems T-RUST end T-RUST PLUS , with an additional topcoat layer of homologated polyesters . These systems ensure excellent functional properties as well as high aesthetical level . To get the maximum of the performances it is also possible to apply a further layer of of protective colourless matt or glossy clearcoat , even superdurable on demand .

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 .

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 indicative ratio is 10% , but an improper management of the recycle may result in remarkable variations of the effect , therefore it must be evaluated in each single case ; please contact arsonsisi s.p.a. and refer to the technical informative note about application of metallic .

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**PRODUCTS FOR LINES
WITH ELECTROSTATIC
DISC**

In the field of aluminium frames are quite common application devices defined as " electrostatic disc " , on which the particle size distribution plays a fundamental role in order to avoid uncovered zones resulting on aluminium bars as " buttonholes " . Codes carrying D in fourth position and /or having D in description are suitable for this particular application and allow to reach a high finish level .

**HOW TO REDUCE
FINISH VARIATIONS**

To minimize colour and effect variations , the whole coating of same lot of parts must be done adopting same applicative parameters (voltage , powder dosage , distance from gun to piece , curing conditions , recycling ratio , etc .) and if possible with same batch of powder . Variations due to inconstant application (which often occur in case of manual spraying) must be taken into consideration . The application of a regular thickness is very important , because excessive differences may result in colour , effect or brilliance dishomogeneity , which are particularly perceptible on metallic and tridimensional surfaces . Evaluation of error tolerance - adopted in the automotive field - is not suitable for powder coatings .

**PRODUCTS FOR
HEAT TRANSFER
PROCESS**

Aside of its series of polyesters for architectural homologated by QUALICOAT and GSB , arsonsisi has the possibility to offer formulations optimized in order to have outstanding results by the so-called " sublichromic " or " heat transfer " process . Products belonging to series **Selac SBL** maintain unchanged the general characteristics and the excellent aesthetical And functional properties of products of the series Y51 , Y52 , Y54 and Y57 , and also offer the peculiarities necessary to the process of transferring images from a suitable inked paper , under the action of heating . Selac SBL formulations grant a very good paper release and a deep penetration of the inks into the binder matrix . This results in very well defined images and in a long time duration .

arsonsisi s.p.a. informs that at the emission date of this document , the specific homologation Qualideco (powder coating + sublimating paper) is not available .

**PRODUCTS FOR POROUS
AND DEGASSING
SUBSTRATES**

For porous or degassing substrates which may release gaseous substances (e.g. some alloys , sandblasted , zinc-plated or galvanized steel) arsonsisi s.p.a. suggests its **Selac AB** versions , which thanks to their particular formulation allow to minimize the problem and to reach high thickness maintaining a smooth surface exempt from undesired micro-pinholes .

POST-FORMING

Microscopic cracks on the surface of coating film may become the trigger point for the corrosion of metallic substrate . Type and thickness of the substrate , pre-treatment , coating thickness , bending radius and temperature , curing conditions , colour , storage period and many other factors may influence the flexibility of a coating . Therefore , in case of post-forming process , the conformity of the coating must be previously tested on some specimens before the industrial serial production . On demand arsonsisi can provide polyester powder coatings especially optimized for this purpose , and having same durability level (**Selac FLX**) .

**APPLICATION OF
SEALANTS , ADHESIVES
AND FOAMS**

Before to apply sealants , adhesives or foams , the coated surface must be carefully cleaned with non aggressive products (e.g. ethylic alcohol or weak detergents) and the adhesion of each product must be previously tested . Coaters must ask the suppliers for detailed informations about the products and about correct use procedures . The use - even for a short time - of organic solvents such as acetone or nitro diluents and very aggressive chemicals could cause a damage of the film , maybe not visible by the eye , but potentially able to prejudice the performances of the coating film . On demand , arsonsisi has the possibility to supply its **Selac WF** products , based on formulations able to grant the best behaviour versus sealants , adhesives and foams .

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**CLEANING AND
MAINTENANCE**

At least once per year it is necessary to proceed to surface cleaning .
In case of high-polluted environments this procedure must be put in place more frequently .
Methods and conditions for the cleaning of coated surfaces please refer to " Cleaning of coated aluminium surfaces " edited by AITAL ot to the specific integrative note issued by arsonsisi s.p.a.

**PACKAGING AND
STORAGE OF
COATED ITEMS**

Packaging : it is necessary to ensure that packaging materials , coatings , stickers , auxiliar agents and articles - which conformity must be verified - are used in the proper way and that are easily removable at the right time .

Storage : not to store in direct contact with floor , place all items inclined on wooden blocks and not under direct sunlight , rain and weathering agents .
Proper ventilation must be ensured .
Under particular conditions humidity and moisture entrapped between coating layer and protective film may creat some white spots on the coated surface (Blanching effect)
This accidental physical process is normally reversible by exposure to heating (ovens or hot-blowers) and can be reduced by the use of suitable materials (breathable or micro-drilled plastic films)
Consult your own suppliers to have right suggestions .

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 .