






CONSTGLASS



Viacryl[®] consolidant



Pilot objects	LE MANS	CHARTRES	
Bay (date)	XVI, Nave (Ca 1120) The Ascension	37, Nave (ca 1205-1215) Typological Passion	42, Nave (ca 1205-1215) Death and Assumption of the Virgin
Exposure	South	North, between 2 buttress	South
Composition of the product	80% Viacryl [®] VC 363 + 20% Desmodur [®] N 75	80% Viacryl [®] SM 564 + 20% Desmodur [®] N 75	80% Viacryl [®] SM 564 + 20% Desmodur [®] N 75
Application: date (age of product) ; studio ; protocol	1974 (35 years) ; Gruber ; paint and glasses	1988 (21 years) ; Alliou ; paint + glasses	1988 (21 years) ; Petit ; paint
Morphology			
Direct observation	Observation of the consolidant is easy: the paint is glossy and under UV, it's fluorescent. Good maintaining of the glass paint except some which are frail (5%), restart of corrosion on the paints and the glasses, cracked Viacryl [®] on glass.	Observation of the consolidant is easy: the paint is glossy and there are rests of Viacryl [®] around grisaille and near leads. Sometimes, Viacryl [®] is coated on all the surface of the piece. No visible alteration, except some grisailles which are frail because of scratches.	Observation of the consolidant is difficult with binocular microscope and raking light, slight fluorescence under UV light. Only visible after dust cleaning (cotton swab with water). No visible alteration. Protection still effective.
SEM observation	Corrosion products = gypsum + gel layer.	Micro-cracks on coated Viacryl [®] , and when it is scratched macro-cracks bare gel layer and paints. Corrosion products = gypsum + gel layer	No micro-cracks on the consolidant, some gaps revealing unprotected grisaille on the edges of some trace lines. Corrosion products = gypsum + gel layer
Desktop Xrays tomography	-	Good adherence of the Viacryl [®] on gel layer and grisaille.	-
Synchrotron tomography	-	Permits also to see the good reversibility of Viacryl [®] .	-
Chemical behaviour			
FTIR	-	-	-
Raman	-	-	-
Mechanical behaviour			
	-	good behaviour (tested with a cotton rolled around a stick)	good behaviour (tested with a cotton rolled around a stick)
Contamination			
Fungi	-	None (rough surface : Low)	None
Bacteriae	-	None (rough surface: Low)	None
Active infestation			
Biological activity	None	Low	Low
Microbiological susceptibility			
	-	Microbiological susceptibility supported by dust and dirt in cracks and fissures due to a rough surface	
Reversibility			
Product 1	Water-ethanol mixture on weathered glass around paints : good results ; to be made under binocular microscope, with cotton rolled around a stick.	Water-ethanol mixture on excess of Viacryl [®] : very long and repeated applications are needed because of the good preservation of the coating	-
Re-treatability			
Product 1	-	ORMOCER [®] : easy to apply, good penetration in the glass paint, good visual aspect	-
Product 2	-	Paraloid [®] B72: easy to apply, good penetration in the glass paint, good visual aspect	-
General observations			

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Recommendations			
Safety/healthy	No more available Not to be employed	No more available Not to be employed	No more available Not to be employed
Preparation			
Application			
Future conditions of conservation	Protective glazing installation, with internal ventilation	Protective glazing installation, with internal ventilation	Protective glazing installation, with internal ventilation