



CONSTGLASS



Table of results



1-Pilot object

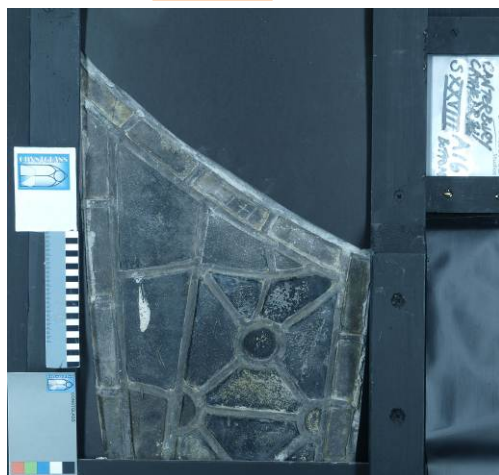
Pilot object:

CAN SXXVIII A16

Picture



sample



**Identification of the panel:** SXXVIII CAN A16

**Treatment:**

Product: Polymer coating, possibly Viacryl®.

Application: Probably applied with a brush.



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**2-Results**

sample reference:

CAN SXXVIII A16

**Questions**

**Techniques**

**Answers**

**Morphology**

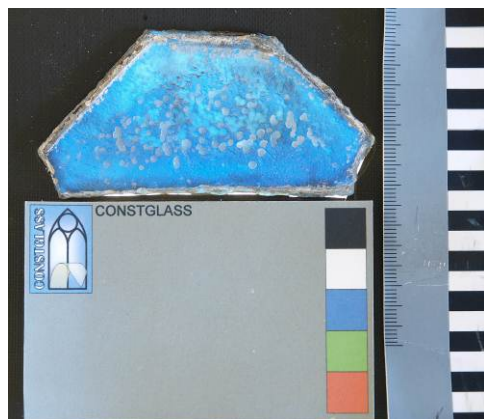
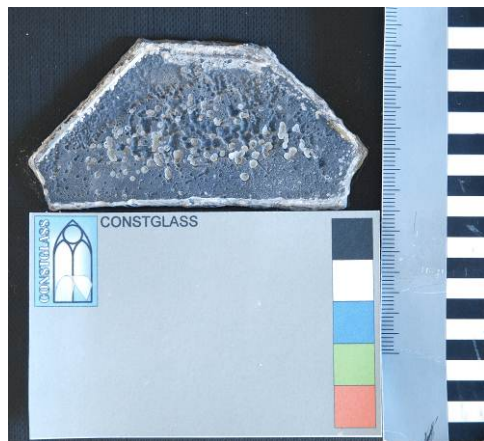
**Optical  
Microscope**

*What is the physical appearance of the coating?*

*Is the coating stable?*



Image under optical microscope in reflected light



Selected glass piece in reflected and transmitted light

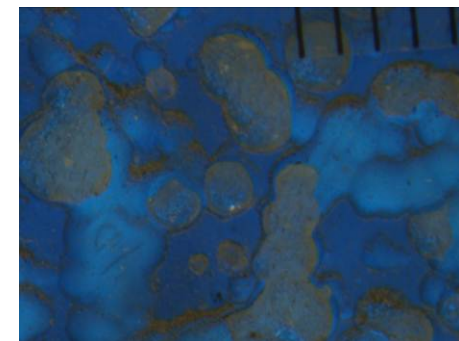


Image under optical microscope in transmitted light

An opaque coating inside the pitting only. Slightly lifting out of the pitting.

Serious deterioration of the film: flakes of coating remain in corrosion pits only; the coating shows discolouration (slight yellowing) and loss of transparency. A higher magnification indicates the coating has not taken off the gel layer.

**Chemical Composition**

**Results from SEM**

Not interesting for this investigation



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<p><b>Organic component composition</b></p> <p><i>What is the chemical composition of the coating?</i>  <i>Is it Viacryl®?</i>  <i>Has the coating degraded or changed in any way?</i></p>	<p><b>Results from LRMH FTIR</b></p>	<p>No conclusion on the composition of the polymer. The composition is close to that of Viacryl®. It is a mix of Viacryl® and another product. The composition of the coating corresponds to an aliphatic amide            What remains of the coating is inside the corrosion pits. There is a discoloration (slight yellowing) and loss of transparency of the coating.</p>
	<p><b>RAMAN</b></p>	<p>n/a</p>
<p><b>Microbiology</b></p>	<p><b>Molecular biology ATP measurements</b></p>	<p>No microbial infestation visible.</p>
<p><b>Reversibility</b></p>	<p><b>Test studies Elimination</b></p>	<p>A reversibility test was deemed unnecessary on this medieval sample because the coating had detached itself from the glass surface in most areas without any intervention by conservators. The coating that remains inside the corrosion pits appear under optical microscope to be lifting, so it is predicted that in time these remains will also detach from the glass. Our primary concern is for the object, and so we do not want to carry out any treatments on it that are not necessary.</p>
<p><b>Re-treatability</b></p>	<p><b>Test studies Re-treatability</b></p>	<p>The protective glazing on the window should provide a stable environment so that re-treatment should not be necessary.</p>