

		
		

Pilot objects	COLOGNE	COLOGNE
Bay (date)	s XXII, south side aisle, "Adoration of the Magi" (1846)	N VI, choir clerestory, "Cycle of Kings" (ca.1300)
Exposure - protective glazing	South	North
Composition of the product	Methyl silicone resin (50% Toluene + 2% hardener TU 2); to prolong the setting time ethyl acetate was added	Methyl silicone resin (50% Toluene + 2% hardener TU 2); to prolong the setting time ethyl acetate was added.
Application: date (age of product) ; studio ; protocol	BS 31 was applied in 1981; carried out by an outside company (no protocol). It was used for the stabilization of damaged paint- layers and of fresh retouches. The application was either partial or all over the surface (internal + external face).	Between 1978-1982 paint-layer consolidation with BS 31 took place; it was used on internal faces for the stabilization of damaged paint layers and fresh retouches; the treatment was carried out by the stained glass studio of Cologne Cathedral (protocol).
<b>Morphology</b>		
Direct observation	The BS 31-coatings seems to be in a good condition. But several parts (thick application) have a milky aspect, as if air bubbles were enclosed. Under the microscope drizzled areas are visible.	The BS 31-coating of the paint partly starts to delaminate. These areas look milky.
SEM observation	for organic materials this analytic device is not suitable	-
Desktop Xrays tomography	The compact glass, the silicone, the paint layer and the tape is visible	-
Synchrotron tomography	The compact glass with traces of metal, the silicone and the tape is very good visible	-
<b>Chemical behaviour</b>		
FTIR	no reference spectrum of BS31 is available and the product is no available anymore	-
Raman	no reference spectrum of BS31 is available and the product is no available anymore	-
<b>Mechanical behaviour</b>		
	The mechanical behaviour seems to be stable in the thinner applied areas. But in the thicker parts of the BS 31-coating, the behaviour is not satisfying. The BS 31 can flake off when being touched with a scalpel.	The mechanical behaviour seems to be good and stabile.
<b>Contamination</b>		
Fungi	-	-
Bacteriae	-	-
<b>Active infestation</b>		
Biological activity	-	-
<b>Microbiological susceptibility</b>		
	Not tested (BS 31 is out of market; no fresh material available)	Not tested (BS 31 is not on the market any more; no fresh material available)
<b>Reversibility</b>		
Product 1	<b>Ethanol (gel with 5% Klucel® M),</b> good results (tests were not carried out on the investigated sample but on a comparable segment!)	<b>Ethanol (as gel)</b> good results, but remains in the paint (tests were not carried out on the investigated sample but on a comparable segment!).

	<b>CONSTGLASS</b> 
	<b>BS31 Coating</b> 

<b>Re-treatability</b>		
Product 1	not intended	not intended
<b>General observations</b>		
	From the conservator's point of view there is no need to remove BS 31 at the moment,	
<b>Recommendations</b>		
Safety/healthy	BS 31 is out of market; no fresh material available	
Preparation		
Application		
Future conditions of conservation		