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## TECHNICAL DATA SHEET

### UNISECT 11HV

Unisect 11HV is a water white transparent polyurethane resin specifically created for use in the production of labels, and badges.

The resin system, when fully cured, exhibits excellent colour stability and mar resistance and adhesion to all the types of substrates normally used in the production of badges and labels.

#### RESIN SPECIFICATION:

##### Part A:

PROPERTY	VALUE
Colour	Water White
Specific Gravity at 25 <sup>0</sup> C	1.06 ± 0.01
Viscosity at 25 <sup>0</sup> C	200 ± 20 mPa.s

##### Part B:

PROPERTY	VALUE
Colour	Water White
Specific Gravity at 25 <sup>0</sup> C	1.13 ± 0.01
Viscosity at 25 <sup>0</sup> C	7500 ± 1500 mPa.s
NCO Value	23.5 ± 1.0 %

TYPICAL CURED ELASTOMER PROPERTIES:

PROPERTY	VALUE
Colour	Water White
Specific Gravity at 25 <sup>0</sup> C	1.09 ± 0.02
Mix Ratio By Volume	1:1 Part A : Part B
Shore <sup>0</sup> D Hardness	55 ± 5
Tensile Strength	18 MPa
Elongation at Break	150 %
Geltime 100 gm Mass at 25 <sup>0</sup> C	12-15 mins
UV Stability - QUV**	No yellowing after 4000 hrs

\*\* QUV Weatherometer Test - 8 hrs UV exposure at 60<sup>0</sup>C using lamps with peak emission at 340 nm followed by 4hrs at 50<sup>0</sup>C and 95% humidity in a continuous cycle.

All of the above tests were carried out on specimens cured at 25<sup>0</sup>C for 7 days.

Although the elastomer is not fully cured for 7 days in practice the material can be handled without damage after 12-24 hours at 25<sup>0</sup>C.

PACKAGING:

Unisect 11HV resin system is available in 5 litre, 25 litre and 200 litre drums and in 50 ml cartridges

RESIN STORAGE AND HANDLING:

The resin system should be stored under clean dry conditions and out of direct sunlight at a temperature between 15<sup>0</sup>C and 25<sup>0</sup>C. At low temperatures the Part B of Unisect 11 resin system may crystallize and should this happen customers are advised to contact Unisect Resources Ltd for advice.

All skin and eye contact with Unisect 11HV resin system should be avoided and the resin system should be used in an area where adequate ventilation is provided and where there is no possible contact with foodstuffs.

Before using Unisect 11HV resin system users should familiarise themselves with the Health and Safety Data Sheet for the product.

To the best of Unisect Resources Ltd's knowledge the information given in this Data Sheet is correct. However since use of the product is beyond the control of Unisect Resources Ltd users must determine for themselves the suitability of the product for their use and no responsibility is or will be accepted for problems or damage arising from the resin's use. No guarantee is given or implied except other than the quality of the resin nor is freedom from patent restrictions to be inferred from these data.