

SCoat 015

References :

Polyol: SCoat 015-Polyol-SC015000

Isocyanate: SCoat 015-ISO-SC000015

Definition :

→ SCoat 015

Soft transparent polyurethane resin, designed for the surfacing, coating and potting of LED or printed circuits. Can be used indoors or outdoors for the protection of surfaces. Fast curing for the application of multiple layers, and strong adhesion to different types of prepared (non-greasy, dust-free) supports. Glossy aspect.

VOC-free, REACH-compatible material complying with the following European Directives:

- 2011/65/EU – 2015/863 – 2017/2102/EU (RoHS 1 and 2)
- 2002/96/EC (WEEE)
- 2000/53/EC (ELVs)
- 2000/11/EC

Average physical properties of the components :

	SCoat 015 Polyol SC 015 000	SCoat 015 Iso SC 000 015	SCoat 015 Mix SC 015 015
Aspect	Transparent liquid	Transparent liquid	Transparent liquid Transparent solid
Hazen coloration (on 50mm) of the solid material	-	-	65
Brookfield LVT viscosity (mPa.s) According to MO-051	400	6000	3000
Density at 25°C According to MO-032	1,05	1,16	1,12

Application properties :

	SCoat 015 Polyol SC 015 000	SCoat 015 Iso SC 000 015	SCoat 015 Mix SC 015 015
Mixing ratio by weight	67	100	
Mixing ratio by volume	74	100	
Mixing time at 25°C			2 min.
Potlife on 167g at 25°C (min.) According to MO-062			25 min.
Touch-dry time at 23°C (on 2mm)			1h 30 min.
Complete hardening at 23°C (on 2mm) According to MO-116			48h
Complete hardening at 70°C (on 2mm) According to MO-116			4h

The values mentioned on this document are based on tests and researches carried out in SYNTHENE's laboratory, in precise conditions. This document cannot be, in any case, considered as a specification data sheet. It is the responsibility of the users to check the suitability of the product in their own conditions, defined and tried by themselves. Synthene company disclaims any responsibility for any consequence occurred by the use of this product.

Average mechanical properties of the cured material :

- **Average data obtained after stabilisation: 7 days at room temperature**

	Standard	Unit	Values Scoat 015
Hardness	ISO 868 : 2003	Shore A	85
Elongation at break	ISO 37 : 2012	%	250
Maximum stress at break	ISO 37 : 2012	MPa	4,5
Tear resistance	ISO 34 : 2015	kN/m	17

Hygiene and safety for using :

Wearing appropriate clothes and accessories (gloves, glasses) is advised.
 Work in a ventilated room.
 For more information, please read the Medical and Safety Data Sheet of the material.

Application process :

➔ **For a coating or surfacing application :**

1. Prepare the support: the support must be dry, clean and dust-free in order to eliminate any trace of substance that can be detrimental to the adhesion (oil, paint, grease, glue or varnish...).
2. Both for outdoor and indoor applications, the support temperature should be at least 3°C above dew point before the application. The support moisture rate should not exceed 5%.
3. Rehomogenise and weigh the polyol and the isocyanate in a clean mixing cup. Duly mix the two components together, making sure that the mix is homogeneous (2 minutes).
4. Pour the mixture in a second cup, without scrapping the bottom neither trying to get the residues back from the first mixing cup walls (in order to avoid problems linked to an inhomogeneous mix). Mix again in the second cup for approximately 1 minute.
5. If necessary, and depending on the application, degas the mixture with a vacuum pump in order to release the air bubbles that have been incorporated during the mixing step.
6. Depending on the support to cover, it is possible to cast the product directly over the part, or to spread it with a paint brush, a squeegee or a serrated trowel according to the requested thickness.
7. In case of bubble appearance on a horizontal part, it is possible to heat the surface while the product is still liquid, in order to correct potential defects.
8. Curing at room temperature or in an oven.
9. Curing conditions :
 - Touch-dry : 1 h 30 min. (at 23°C)
 - Complete hardening at 23°C : 48 hours
 - Complete hardening at 70°C : 4 hours

The values mentioned on this document are based on tests and researches carried out in SYNTHENE's laboratory, in precise conditions. This document cannot be, in any case, considered as a specification data sheet. It is the responsibility of the users to check the suitability of the product in their own conditions, defined and tried by themselves. Synthene company disclaims any responsibility for any consequence occurred by the use of this product.

Packaging :

- Parcel of 6 kits of (0.67 kg polyol + 1,0 kg isocyanate) = 10.02 kg
- Parcel of 2 kits of (3.35 kg polyol + 5,0 kg isocyanate) = 16.7 kg

Storage :

12 months in original and unopened containers, stored between 15 and 25 °C.