

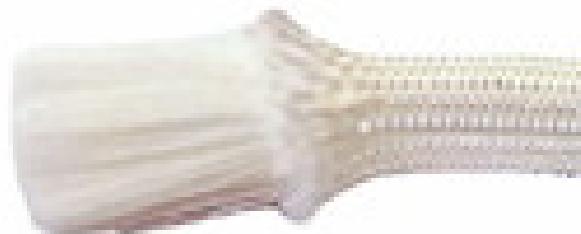
Raylok 5021 and Raylok 5022:

**two new high performance
solutions for UV curable coatings
on glass-fiber electrical sleeves**

Raylok 5021 and Raylok 5022

are especially developed for sleeving glass-fiber tubes used in the automotive industry.

They both combine the necessary high level mechanical properties and fast production speed and are a step forward compared to existing materials, such as IRR281.



UV coatings bring the following advantages compared to conventional solvent borne systems:

- reduced space occupation thanks to absence of thermal ovens
- up to 10 times faster processing
- no solvent emission (VOC free)
- reduced fire risks

UV curable clear coats on glass-fiber electrical sleeves are applied via a hotmelt process

Chemical nature: aromatic urethane acrylate

Viscosity: 10.000-12.500 mPa.s @ 60 °C

Elongation ~ 100 – 120 %

To obtain a high reactive clear coating, Raylok 5021 needs to be formulated with 4% photoinitiators, such as Additol HDMAP or Additol BCPK

For colored coatings, especially designed photoinitiators have to be chosen

Further technical data can be found in the TDS

Chemical nature: Raylok 5022 is a ready-to-use aromatic urethane acrylate mixture for clear coatings, already containing a suited photoinitiators blend

Viscosity: 8000 mPa.s @ 60°C

Elongation ~ 85 - 100 %

Further technical data can be found in the TDS

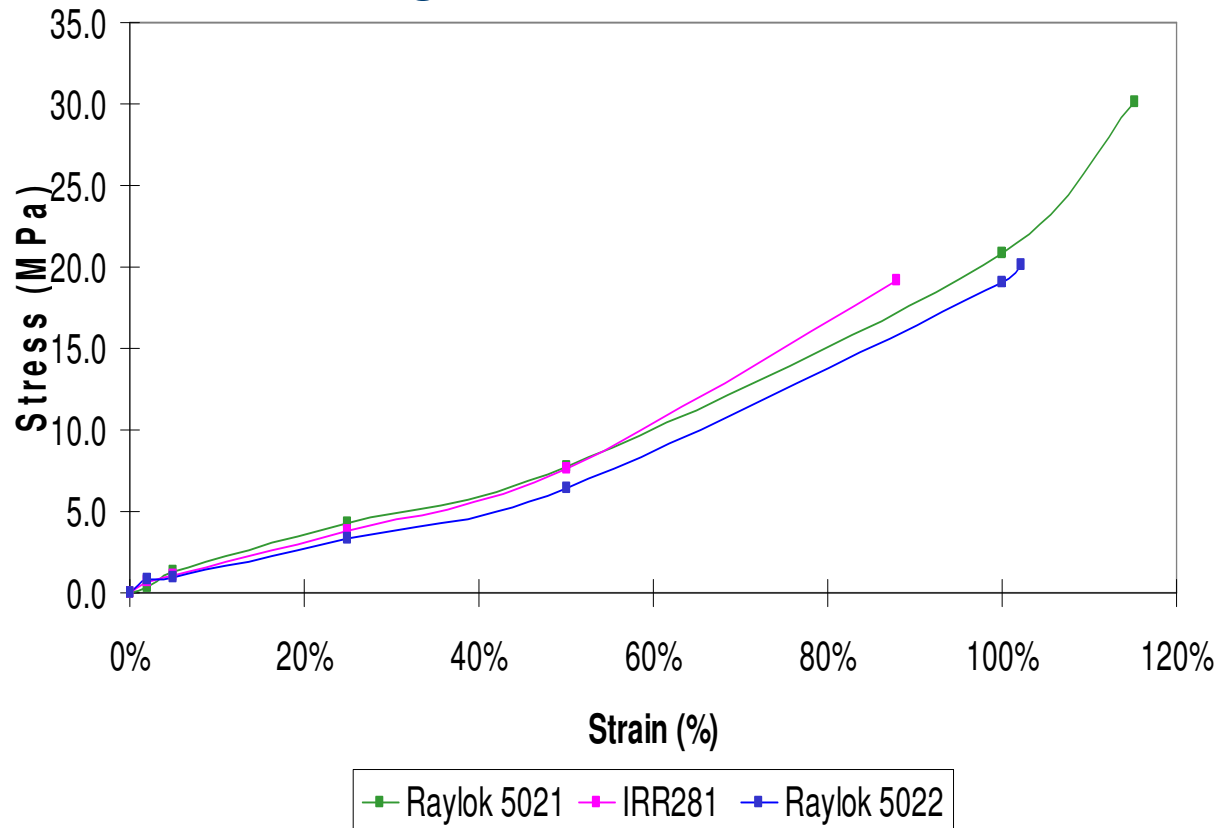
Both products have a proven track success record in providing all the necessary properties required in automotive electrical sleeves applications, such as:

Elongation at break

Dielectric properties

Thermal ageing

Chemical resistance

Elongation at break vs stress

Raylok 5021 and 5022 show both higher elongation at break compared to the Cytec's existing standard product for electrical sleeves IRR 281

- the UV coating is applied through a reservoir with a cup
- in order to decrease the viscosity, the application is done at 60 – 70 °C
- the application is generally performed vertically with two UV lamps in front of each other, located immediately after the application step (see next slide).
- Typical Hg lamp power for clear coatings is 120 W/cm
- Cooling step or talcum application to limit the tack, needs to be foreseen just after the UV curing step

see next slide for a typical process scheme

**Typical process scheme
for UV curable
coatings on electrical
sleeves**

