

Product Specification

TEGO® RC 711

TEGO® RC 711 is a solvent-free silicone acrylate for paper and film release coatings. TEGO® RC 711

is used in combination with other TEGO® RC Silicones as an **anchorage component** as well as to control the relevant release levels.

Physical properties

		Remarks
Release properties	tight	Mainly used as anchorage additive
Active matter	100 %	Volatile content < 1 %
Viscosity, 25 °C (77 °F)	~ 600 mPas	The viscosity of TEGO® RC 711 formulations can be substantially reduced by "warm" application
Specific gravity, 25 °C (77 °F)	approx. 1 g/cm ³	-
Colour	colourless, grey, yellow	The colour of our TEGO® RC Silicones is absolutely irrelevant as to their efficiency/properties, as guaranteed by our test certificate
Appearance	clear	-
Flash point (DIN 51758)	> 100 °C (> 212 °F)	-
Guaranteed pot life (with photoinitiator included)	min. 72 h	RC Silicone blends with photoinitiator added must be stored in the dark at temperatures not exceeding 30 °C (86 °F). Under these conditions, the pot life can reach 12 months. Please stir and test before using the material again.
Inerting	necessary	UV curing requires inerting by nitrogen to < 50 ppm residual oxygen in the curing chamber.

Application fields

When used on its own, TEGO® RC 711 yields release coatings with high release values.

TEGO® RC 711 mainly serves as an anchorage component for all mixtures with TEGO® RC Silicones with easy or controlled release values and is used for the manufacturing of release coatings for self-adhesive products, like e. g.:

- Self-adhesive labels
- Self-adhesive tapes
- Hygiene products
- and many more

Advantages

TEGO® RC 711 shows excellent aging characteristics even with self-cross-linking adhesives.

Combined with other TEGO® RC Silicones, namely those of the "easy" and "controlled" release types, TEGO® RC 711 works as an anchorage provider and enables the controlled increase of the relevant release properties.

Dosage/Handling

TEGO® RC 711 may be cured by either electron beam or ultraviolet radiation (UV curing requires the addition of a suitable photoinitiator).

To guarantee a good anchorage on the relevant substrate surface, an addition level of min. 30 % of TEGO® RC 711 is needed, without interfering with the relevant easy or controlled release properties.

Higher levels (more than 30 % TEGO® RC 711) will allow the controlled increase of the release values. The recommended dosage is dependent on the type of adhesive used.

When used in combination with other TEGO® RC Silicones, stirring is necessary prior to application.

Suitability tests

Before using any new silicone formulation, we recommended checking that the final product meets the target requirements.

This includes but is not limited to:

- Compatibility of release coating against targeted adhesives using ageing tests at both low and high temperatures.
- The influence of electron beam or Gamma irradiation on aging and release, e. g. sterilization.
- The influence of secondary UV exposure on release and aging, e. g. when curing UV printing inks on label stock with a clear face stock.

Thermal aging or post-irradiation may cause a property change in the final product.

Storage stability

It is recommended that TEGO® RC 711 is stored in the dark at temperatures not exceeding 30 °C (86 °F).

Under these conditions the storage stability of TEGO® RC 711 is 24 months subject to storage in original, sealed containers.

Packaging

25 kg (55 lbs) plastic containers
pallet size: 12 x 25 kg = 300 kg

200 kg (440 lbs) plastic lined steel drums
Pallet size: 4 x 200 kg = 800

1 000 kg (2 200 lbs) container

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

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