

Product Specification

TEGO® RC 800

TEGO® RC 800 is a solvent-free silicone acrylate for paper and film release coatings. It is used as an additive to help provide controlled and tight

release values in combination with either TEGO® RC 715/ TEGO® RC 722 or TEGO® RC 902/ TEGO® RC 722.

Physical properties

		Remarks
Release properties	controlled to tight	–
Active matter	100 %	Volatile content < 1 %
Viscosity, 25 °C (77 °F)	~ 450 mPas	The viscosity of TEGO® RC 800 may be reduced considerably by preheating up to 60°C.
Specific gravity, 25 °C (77 °F)	approx. 1 g/cm ³	–
Colour	amber	The colour of our TEGO® RC Silicones is irrelevant with respect to their performance, as guaranteed by our test certificate
Appearance	clear to slightly turbid	–
Flash point (DIN 51758)	> 100 °C (> 212 °F)	–
Guaranteed pot life (with TEGO® Photoinitiator A18 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

TEGO® RC 800 is used for the manufacture of release coatings with controlled release properties for self-adhesive products, e. g.

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

Advantages

TEGO® RC 800 is a tight and controlled release component that provides simple processing, fast reaction time and good aging properties.

Release coatings prepared with TEGO® RC 800 exhibit smooth release behaviour, consistent release values over a wide range of stripping speeds and are especially well-suited for achieving differential release properties.

Dosage/Handling

TEGO® RC 800 may be cured with ultraviolet radiation (UV) by adding a suitable photoinitiator.

We recommend 2 % TEGO® Photoinitiator A18 and medium pressure mercury UV lamps with nitrogen inerting. It may also be cured by means of electron beam.

Blends of TEGO® RC 800 with TEGO® RC 715 provide controlled and tighter release values. Lower levels of controlled release may be achieved by blending of TEGO® RC 800 with TEGO® RC 902. The exact ratio is determined by the choice of adhesive and substrate, among other variables.

To achieve good adhesion on all substrates the addition of 30 % TEGO® RC 722 is recommended.

Good stirring is necessary prior to application.

Suitability tests

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

This includes but is not limited to:

- Compatibility of release coating against targeted adhesives using aging 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 800 is stored in the dark at temperatures not exceeding 30 °C (86 °F).

Under these conditions, when stored in the original, closed containers the storage stability of TEGO® RC 800 is 12 months.

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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