

Technical Information

TEGO® Photoinitiator A 18

Product description

TEGO® Photoinitiator A 18 is a highly efficient, solvent-free photoinitiator, which very effectively meets the requirements of TEGO® RC Silicones when cured by UV radiation

Physical properties

Active matter	100 %
Viscosity (20 °C/68 °F)	~ 400 mPas
Specific gravity (20 °C/68 °F)	Approx. 1 g/cm ³
Colour	Amber, reddish
Appearance	Clear to slightly turbid
UV absorption	Max. at 256 nm
Flash point (DIN 51758)	> 100 °C (> 212 °F)

Application field

TEGO® Photoinitiator A 18 was developed especially for use with our TEGO® RC Silicones and gives some unique advantages over the existing range of photoinitiators.

At adequate addition levels TEGO® Photoinitiator A 18 offers excellent curing properties and good compatibility with all TEGO® RC Silicone acrylates.

Advantages

TEGO® Photoinitiator A 18 is a product containing 100 % active matter. The formation of volatile components and odour during photo curing is very low. Therefore, the use of TEGO® Photoinitiator A 18 extends intervals for cleaning of the quartz plates.

Dosage/Handling

The addition level of TEGO® Photoinitiator A 18 is between 1.0 and 2.0 %.

Production lines with sufficient UV output and moderate line speed (below 200 m/min.) may run formulations with just 1.5 % TEGO® Photoinitiator A 18.

High speed coating lines with UV output close to the necessary limit will need to run formulations with 2.0 % TEGO® Photoinitiator A 18. All higher acrylated RC Silicones blends including TEGO® RC 715, TEGO® RC 706 and TEGO® RC 711 may be run at just 1.0 % addition level.

After preparation of the ready-for-use mixture, stir well. The pot life of TEGO® RC Silicone blends prepared with TEGO® Photoinitiator A 18 is at least 72 hours.

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 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® Photoinitiator A 18 is stored dry and in the dark in sealed original packaging at temperatures below 30 °C (86 °F).

Under these conditions TEGO® Photoinitiator A 18 has a storage stability of 12 months subject to storage in sealed, original containers.

Packaging

1 kg glass bottles
30 kg plastic cans

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport of chemicals
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicological and ecotoxicological effects

is given in our safety data sheets.

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