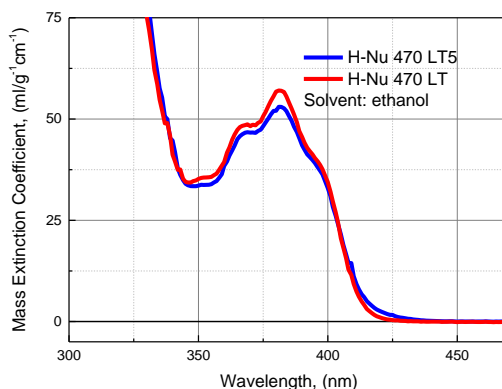


## H-Nu 470 LT and H-Nu 470 LT5 Liquid Blends

### Visible/UV-Visible Light Photoinitiators

#### General Information

- **H-Nu 470LT and H-Nu 470LT5** are a broad wavelength use liquid blend photoinitiators, which will allow for easy addition to your free-radical curable formulation, and will photoinitiate resins across the mid-UV, UVA and near-UV visible portion of the light spectrum
- **H-Nu 470LT series** are particularly helpful for tack-free surface curing using 365 and 395 nm LED
- **H-Nu 470LT/H-Nu 470LT5** - commercial photoinitiators, broad absorbance range of 300 nm to 420 nm ( $\lambda_{max}=380$  nm)



#### Benefits of Use

- Easy to incorporate liquid, minimizing downtime from solubility issues
- Time and energy savings when one-pass thick cure can replace thin multi-layered coatings
- Cure through UV opaque or pigmented formulations
- Initiator bleaching: from pale yellow to no residual color

#### Physical Properties

Appearance	Pale yellow Liquid
Molecular Weight	Mixture (N/A)
Absorbance Maximum	380 nm
Viscosity @ 25C	140 cps (H-Nu 470LT) 310 cps (N-Nu 470LT5)

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## Performance of H-Nu 470 LT and H-Nu 470 LT5 with a benchmark formulation, PS4, containing multifunctional acrylates.

Formulation	PS4, 6% H-Nu 470 LT5	PS4, 8% H-Nu 470 LT5	PS4, 10% H-Nu 470 LT5	PS4, 12% H-Nu 470 LT5
Tack free curing time, 270 (mW/cm <sup>2</sup> ), 395 nm LED CF1000 (Clearstone unit)	5-6 min	2-3 min	30 sec - 1 min	3-6 sec
UVA lamp, 9W	1-2 min	< 1 min	< 1 min	< 1 min
Formulation	PS4, 6% H-Nu 470 LT	PS4, 8% H-Nu 470 LT	PS4, 10% H-Nu 470 LT	PS4, 12% H-Nu 470 LT
Tack free curing time, 270 (mW/cm <sup>2</sup> ), 395 nm LED CF1000 (Clearstone unit)	>15 min	8-10 min	3-4 min	1-2 min
UVA lamp, 9W	2-3 min	1-2 min	< 1 min	< 1 min

- Recommended load of **H-Nu 470LT** is 8-12% by weight. Testing of several concentrations in a “ladder” study between 2-12% is recommended to achieve best results
- Recommended load of **H-Nu 470LT5** is 6-12% by weight.
- H-Nu photoinitiator systems and materials that contain them are light sensitive and should be kept in the dark or in light proof bottles when not in use.
- “Dimmed” light conditions or other form of light shielding for mixing and formulating when using H-Nu photoinitiators are recommended to prevent unwanted pre-polymerization.
- Stability of the formulations containing H-Nu 470LT and H-Nu 470LT5 photoinitiators has to be checked individually.

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### Product Safety and Handling

Please read MSDS information before handling any products described in this brochure.

### Disclaimer

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