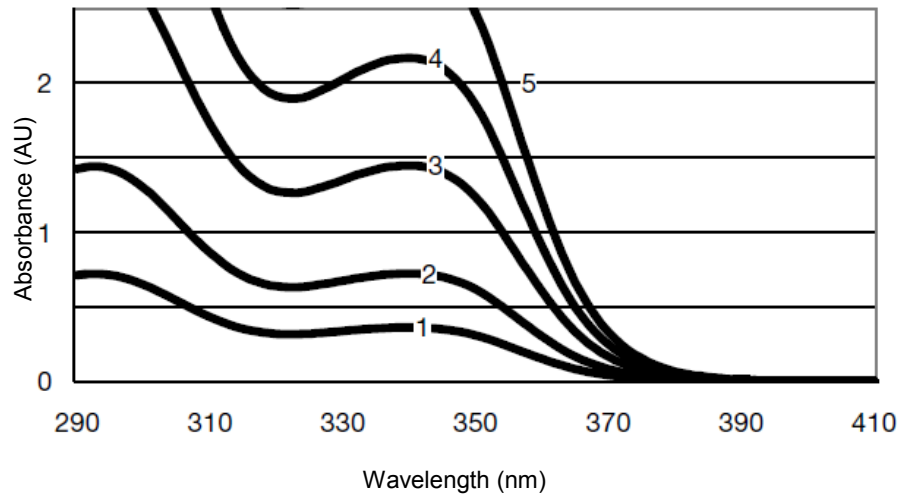




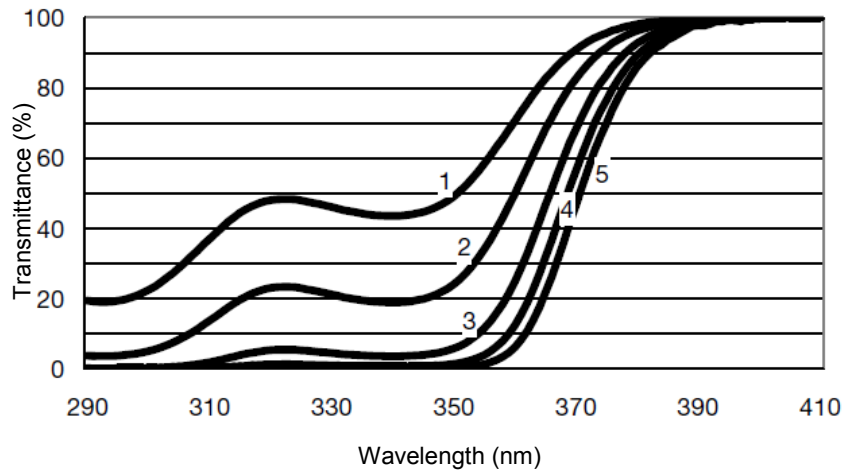
## UV Absorbance Spectrum



Line one: 10 mg/l (0.001% Tinuvin 405, corresponds to 0.25% active in 40  $\mu$ m film)  
Line two: 20 mg/l (0.002% Tinuvin 405, corresponds to 0.50% active in 40  $\mu$ m film)

## UV Transmission Spectrum

*(The theoretical concentration of the UVA in an applied 40  $\mu$ m clear coat was calculated as a function of the concentration in toluene with the help of the Lambert-Beer law. Spectra were recorded in toluene, light path length = 1 cm.)*



Line three: 40 mg/l (0.004% Tinuvin 405, corresponds to 1.00% active in 40  $\mu$ m film)  
Line four: 60 mg/l (0.006% Tinuvin 405, corresponds to 1.50% active in 40  $\mu$ m film)  
Line five: 80 mg/l (0.008% Tinuvin 405, corresponds to 2.00% active in 40  $\mu$ m film)

## Applications

Tinuvin 405 is designed to fulfill the high performance and durability requirements of acrylic powder coatings.

Tinuvin 405 is recommended for applications such as:

- High performance automotive OEM powder coatings
- High performance industrial powder coatings

For outdoor applications, Tinuvin 405 needs to be combined with a hindered amine light stabilizer (HALS) such as Tinuvin 144 or Tinuvin 152.

**Recommended concentrations** The amount of Tinuvin 405 required for optimum performance should be determined in laboratory trials covering a concentration range.

The dry film thickness (DFT) directly affects the amount of UVA needed. The following recommended concentrations are to achieve proper stabilization for given DFT (light stabilizers % is indicated on total formulation):

10 µm – 20 µm:	8.0 % – 4.0 wt % Tinuvin 405
20 µm – 40 µm:	4.0 % – 2.0 wt % Tinuvin 405
40 µm – 60 µm:	2.0 % – 1.5 wt % Tinuvin 405

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## **Safety**

### **General**

The usual safety precautions when handling chemicals must be observed. These include the measure described in Federal, State and Local health and safety regulations, thorough ventilation of the workplace, good skin care, and wearing of protective goggles.

### **Safety Data Sheet**

All safety information is provided in the Safety Data Sheet for Tinuvin 405.

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## **Storage**

Please refer to the “Handling and Storage of Polymer Dispersions” brochure.

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## Important

The descriptions, designs, and data contained herein are presented for your guidance only. Because there are many factors under your control which may affect processing or application/use it is necessary for you to make appropriate tests to determine whether the product is suitable for your particular purpose prior to use. **NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, OR DATA MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, DATA OR DESIGNS PROVIDED BE PRESUMED TO BE A PART OF OUR TERMS AND CONDITIONS OF SALE.** Further, you expressly understand and agree that the descriptions, designs, and data furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for same or results obtained from use thereof, all such being given to you and accepted by you at your risk.

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