# Printing & Packaging Industrial Coatings

**Technical Data Sheet** 

# Tinuvin® 328



**Product Description** 

Tinuvin® 328 is a UV absorber of the hydroxyphenyl-benzotriazole class designed for coatings. Because of its extended UV absorption, Tinuvin® 328 provides efficient protection to coatings and light sensitive substrates.

Key Features & Benefits

- Hydroxyphenyl-benzotriazole UVA with excellent spectral coverage in the UV A & B regions
- Good photopermanence
- Improves exterior durability of ambient and low temperature cured coatings

**Chemical Structure** 

2-(2H-benzotriazol-2-yl)-4, 6-ditertpentylphenol

### **Properties**

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CAS No: Appearance	25973 – 55 – 1 slightly yellow powder
Molecular weight	351.5
Solubility (g/100 g solution) at 20 °C:	
butylcarbitol	3.5
butanol	2.5
butyl acetate	15
ethylglycol	4
1-methoxypropylacetate-2	10
methylethylketone	14
Solvesso 100 <sup>1</sup>	25
Solvesso 150 <sup>1</sup>	25
xylene	34
water	< 0.01

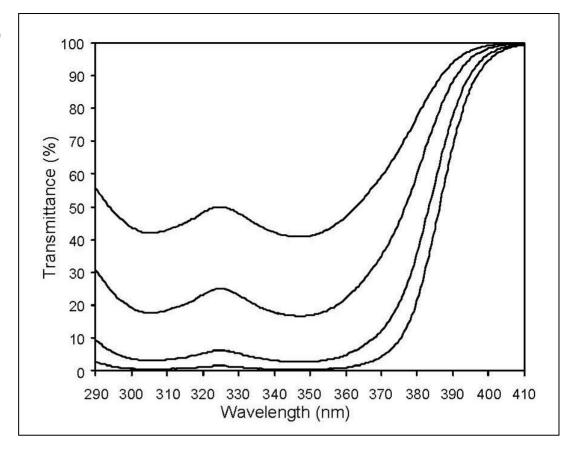
<sup>1</sup> trademark of Esso

These typical values should not be interpreted as specifications.

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**Transmittance Spectrum** 

(in toluene, cell thickness 1 cm)



Explanation:

Top Line: 0.001% Tinuvin® 328, corresponds to 0.25% in a 40  $\mu$  film Second Line: 0.002% Tinuvin® 328, corresponds to 0.50% in a 40  $\mu$  film Third Line: 0.004% Tinuvin® 328, corresponds to 1.0% in a 40  $\mu$  film Bottom Line: 0.006% Tinuvin® 328, corresponds to 1.5% in a 40  $\mu$  film

# **Applications**

Tinuvin® 328 is recommended for applications such as:

- · Automotive coatings
- Industrial coatings
- Trade sale paints such as wood stains or do-it-yourself paints.

Tinuvin® 328 may be used in combination with a light stabilizer of the sterically hindered amine or aminoether class (HALS) such as Tinuvin 292, Tinuvin 123, or Tinuvin 144. These combinations give coatings superior protection against gloss reduction, cracking, blistering, delamination and color change. Tinuvin® 328 is only recommended for ambient and low temperature cured systems, i.e. airdrying alkyd-based systems.

The amount of Tinuvin<sup>®</sup> 328 required for optimum performance should be determined in trials covering a concentration range.

#### Recommend Concentrations

Tinuvin® 328 1.0 – 3.0 %

Tinuvin® 144, Tinuvin® 292 or Tinuvin® 123 0.5 – 2.0 %

(concentrations are based on weight percent binder solids)

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## Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures 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 Tinuvin® 328.

# **Important**

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#### U.S & Canada

BASF Corporation 24710 W Eleven Mile Road Southfield, MI 48033 ph: 1(800) 231-7868 fax:1(800) 392-7429

Email: Custserv\_charlotte@basf.com Email: edtech\_info@basf.com www.basf.us/dpsolutions

#### Mexico

BASF Mexicana, S.A. de C.V. Av. Insurgentes Sur # 975 Col. Ciudad de los Deportes C.P. 03710 Mexico, D.F. Phone: (52-55) 5325-2756

Fax: (52-55) 5723-3011

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