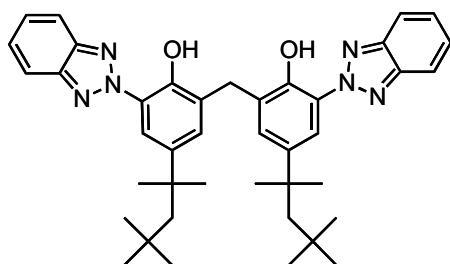


ADK STAB LA-31/ LA-31G / LA-31RG

— Benzotriazole UV Absorber —

Identification



[CAS Number]

103597-45-1

[Chemical Name]

2,2'-Methylenebis[6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol]

[Formula]

$C_{41}H_{50}O_2N_6$

[Molecular Weight]

659

Features

- High molecular weight benzotriazol UV absorber which shows very low volatility, excellent thermal stability, excellent retention within the polymer, and resists mold staining during processing compared to other benzotriazol-type UV absorbers.
- Is recommended for applications which require high-temperature processing or/and high retention within the polymer such as polycarbonate sheets.
- Protects polymers from photo-degradation by absorbing UV light before it hits the polymer, which drastically reduces discoloration and slows the decline in physical and mechanical properties of the polymer.
- Approved as an indirect additive in food contact substances in US and Japan. Potential application is food packaging. (For additional information such as kind of adaptable polymers, please ask our Sales Department.)

Applications

- Engineering plastics such as PA, PC, POM, Polyesters
- Styrene resins such as PS and ABS
- PMMA

Physical and mechanical properties

- Appearance LA-31/LA-31RG: Pale yellow powder
LA-31G: Pale yellow granule
- Melting point 194~200 °C
- Thermal stability 5% weight loss temp.: 375°C
10% weight loss temp.: 393°C
- Solubility(g/100g solvent, 25°C) Ethyl acetate:<1, Ethanol:<1, Xylene:5
Water:<0.13 (mg/ℓsolvent, 21.5°C)

(*Above value of properties are just typical, not specific)

Performance

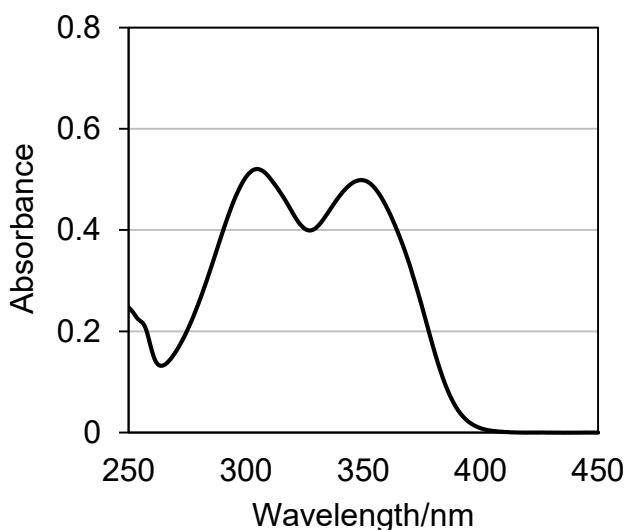


Fig.1 UV absorption spectra

*Chloroform solution (10mg/ L), 1cm cell

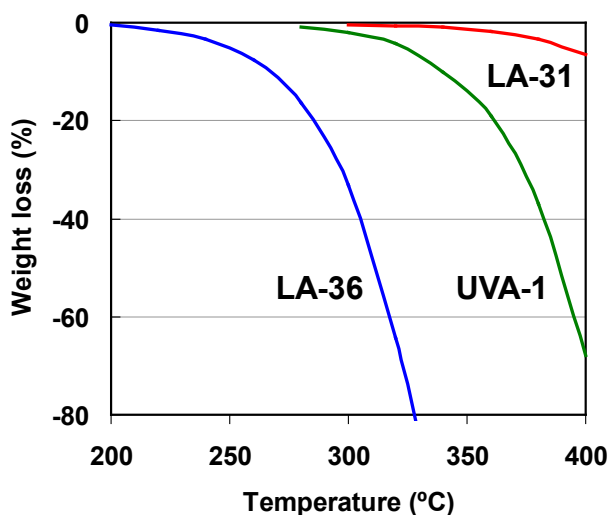


Fig.2 Volatility (TGA)

Heating rate: 10°C/ min.
In air stream

UVA-1: 2-(2H-Benzotriazol-2-yl)-4,6-bis(a,a-dimethylbenzyl)phenol

LA-36 : 2-(3'-tert-Butyl-2'-hydroxy-5'-methylphenyl)-5-chlorobenzotriazole

Handling and storage

- Please store in the original container securely under cool and dry conditions.
- Protective clothing should be worn when operators are handling or being exposed to this product. Please review the SDS for further detailed advice.