



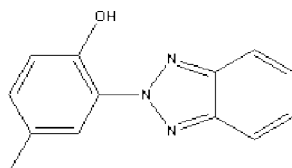
Entrada 200 Unit 203 tel.: 31 20 4166638
 1114 AA Amsterdam-Duivendrecht fax: 31 20 5241356
 The Netherlands email : sales@hunan-chem.com

www.hunan-chem.com

Trade registration nr. 50769421 Chamber of Commerce Amsterdam

Technical Data Sheet

Product name: UV-P
Chemical name: 2-(2-hydroxy-5-methylphenyl)benzotriazole
Synonym: 2-(2-benzotriazole)-4-methylphenol,
 2-(2-hydroxy-5-methylphenyl)-2H-benzotriazole)
 UV-P,
CAS No: 2440-22-4
EC No: 219-470-5
Molecular formula: C₁₃H₁₁N₃O
Molecular weight: 225
IUPAC Name: 2-(benzotriazol-2-yl)-4-methylphenol
Molecular Structure:



Quality norm: technical grade

Specification:

Appearance:	White crystalline powder
Assay:	99.0% min.
Melting point:	128.0 ~ 133.0 °C
Ash content:	0.1% max.
Light transmittance	
440 (nm):	97.0% min.
500 (nm):	98.0% min.

Characterization

UV-P is an ultraviolet light absorber (UVA) of the hydroxyphenol benzotriazole class, imparting good light stability to a wide variety of polymers during its use.

Packing:

In 25kg net carton box, 500kgs net/20box on one pallet shrink wrapped or as required.

Customs HS Code:

2933 9980 90 (Europe)

Applications

UV-P provides ultraviolet protection in a wide variety of polymers including styrene homo- and copolymers, engineering plastics such as polyesters and acrylic resins, polyvinyl chloride, and other halogen containing polymers and copolymers (e.g. vinylidenes), acetals and cellulose esters. Elastomers, adhesives, polycarbonates, polyurethanes, and some cellulose esters and epoxy materials also benefit from the use of UV-P

Features/ Benefits

UV-P features a strong absorption of ultraviolet radiation in the 300-400 nm region. It also has a high degree of photostability over long periods of light exposure. The high absorbance combined with photostability and the ability to release absorbed energy in non sensitizing ways make UV-P an effective stabilizer against the effects of ultraviolet light.

UV-P has Food Contact Approvals in rigid and flexible PVC applications for food, consumer care products and pharmaceuticals, preserving the package contents from the detrimental effects of light.

Guidelines for use

The use levels of UV-P range between 0.10% and 0.50%, depending on substrate and performance requirements of the final application. UV-P can be used alone or in a variety of blends and combinations with antioxidants stabilizers where often a synergistic performance is observed.

UV-P may react with various heavy metal ions to form salts or complexes. For example, if UV-P comes into contact with iron or cobalt ions, colored complexes are formed. Reducing and oxidizing agents used in polymerization and curing processes have no effect on the stability of UV-P.

Physical Properties Melting Range	128-132°C
Flashpoint	205°C
Specific Gravity (20°C)	1.38 g/cm ³
Vapor Pressure (20°C)	1.5 E-4 Pa
Solubility (20°C)	% w/w
Water	< 0.01
Acetone	3
Benzene	7
Chloroform	13
Cyclohexane	1
Ethyl acetate	3.5
n-Hexane	0.8
Methanol	0.2
Methylene chloride	16
Volatility (pure substance; TGA, heating rate 20°C/min in air)	
Weight loss (%)	Temperature (°C)
1.0	153
2.0	170
5.0	190

Handling & Safety

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Protect skin. Prevent contamination of the environment. Avoid dust formation and ignition sources.

For more detailed information please refer to the material safety data sheet.

Registration UV-P is listed on the following Inventories:

Australia: AICS

Canada: DSL

China: First Import

Europe: EINECS

Japan: MITI

Korea: ECL

Philippines: PICCS

USA: TSCA