

PowerSorb™ 120 UV Absorber

Introduction

PowerSorb™ 120 is a substituted benzoate that absorbs ultraviolet radiation and through a reversible chemical rearrangement, dissipates the energy as heat.

Chemical Name

2,4-Di-tert-butylphenyl-4'-hydroxy-3',5'-di-tert-butyl benzoate;
2,4-Di-tert-butylphenyl 3,5-di-tert-butyl-4-hydroxybenzoate

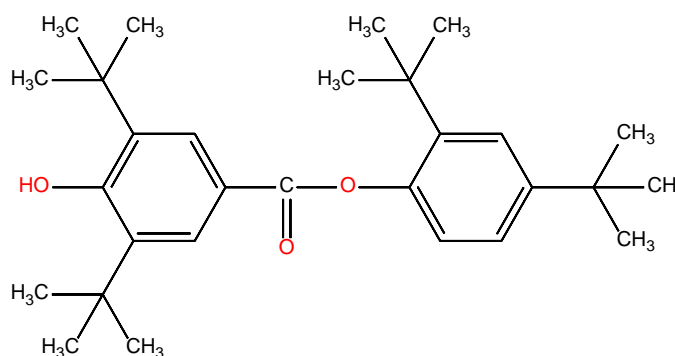
CAS Number

4221-80-1

EINECS Number

224-166-0

Chemical Structure



Chemical Formula

$C_{29}H_{42}O_3$

Molecular Weight

439

Physical Properties

Appearance	White powder
Specific Gravity [20°C]	1.06
Melting Point (°C)	194-197
Volatile Loss (%)	Max.0.5
Color of Solution (460nm, %)	Min.97
Color of solution (500nm, %)	Min.99
L Value (color meter)	Min.94.5
Ash (%)	Max.0.1
Color (APHA)	Max.10
Purity (%)	Min. 99.5

PowerSorb™ 120 UV Absorber

Solubility

Solubility [20°C]	% w/w
Acetone	10
Chloroform	41
Ethyl acetate	11
n-Hexane	1
Methanol	1
Isopropanol	2
Toluene	13
Water	<0.01

Benefits & Applications

PowerSorb™ 120 provides better initial color than benzotriazoles.

PowerSorb™ 120 exhibits a synergistic effect in combination with HALS. (Hindered Amine Light Stabilizer)

PowerSorb™ 120 can be used in combination with phenolic and phosphite antioxidants, and HALS for thermal and light stabilization in outdoor use – i.e. TPO bumper application.

PowerSorb™ 120 is recommended for use at levels of 0.2% ~ 1% in Polypropylene, Polyethylene, TPO, PVC, EVA, unsaturated Polyester ABS, AS, etc.

Handling & Storage

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. Protect skin. Avoid dust formation and ignition sources.

This product may be stored up to one year in a sealed container. Containers should be stored in a cool, dry area. Extended storage at elevated temperatures or exposure to direct heat or sunlight could reduce product life. Keep containers sealed when not in use.

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

Packing

PowerSorb™ 120 is supplied in 20Kg Paper Bag, 25Kg Carton Box, 50Kg



PowerSorb™ 120 UV Absorber

Fiber Drum.

Note

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

We specifically disclaim any other express or implied warranty of fitness for a particular purpose or merchantability.

We disclaim liability for any incidental or consequential damages.