Innovative Chemistry for a Sustainable Future
India I Singapore I Brunei

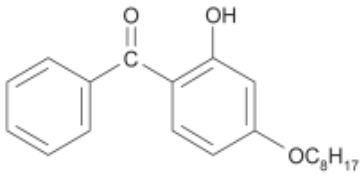
PUREsorb 531

Benzophenone UV Absorber

Description

PUREsorb 531 is an ultraviolet light absorber (UVA) of the benzophenone class, imparting good light stability when used in combination with a hindered amine light stabilizer (HALS). It shows good compatibility with polyolefins and plasticized PVC.

Chemical Structure



Chemical name 2-Hydroxy-4-n-Octoxybenzophenone

CAS number 1843-05-6 **Molecular weight** 326.4 g/mol

Features & benefits

PUREsorb 531 is particularly suitable for thick films, typically > 100 µm and thick sections. The low vapor pressure of **PUREsorb 531** prevents losses during processing. Low migration rates reduce the risk of blooming.

Application

The main application of **PUREsorb 531** is in combination with a HALS for the light stabilization of LDPE, LLDPE as well as EVA copolymers for agricultural films. It can also be used as a UV barrier to protect the contents of packages for both industrial and consumer applications. It is also suitable for HDPE moulded articles, e. g. in crates, and plasticized PVC and rubbers.

It can be used in combination with antioxidants, phosphites and other light stabilizers. For the use of **PUREsorb 531** in thick sections, a proper UV stabilization can be achieved in PE with concentration of 0.10 – 0.5%. With films, the UV stabilizations of LLDPE, LDPE and EVA require 0.15 – 0.5%.

Handling & Safety

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. Prevent contamination of the environment. Avoid dust formation and ignition sources. For more detailed information please refer to the SDS.

Storage

PUREsorb 531 has to be stored in tightly sealed original container in a cool and well-ventilated area, away from direct sunlight.

Physical Properties:

Product form	Pale cream to light yellow powder
Melting range	47 - 49°C
Specific gravity (20°C)	1.16 g/cm^3
Vapor pressure (20°C)	4.6 E-7 Pa
Bulk density (g/l)	Powder: 360 – 440; Pellets: 440 - 540

Solubility (20°C) g/100g solution		Solubility (20°C) g/100g solution	
- Acetone	43.0	- Chloroform	61.0
- Ethyl-acetate	44.0	- Ethanol	3.5
- Methanol	1.7	- n-hexane	12.0
- Dichloromethane	67.0	- toluene	> 50
- Water	< 0.01		

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November' 2019