

GENSCENT OB-1 Fluorescent Whitening Agent

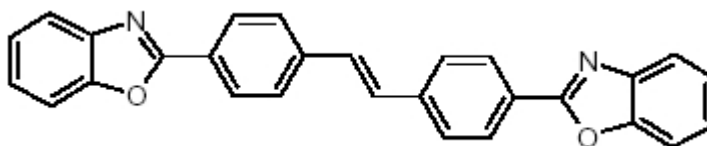
Characterization GENSCENT OB-1 is a high molecular weight optical brightener (fluorescent whitening agent) of the stilbene benzoxazol class, suitable for the optical brightening of polymers at all stages of processing

Chemical Name 4,4'-bis(benzoxazol-2-yl) stilbene

CAS Number 1533-45-5

Structure

GENSCENT OB-1



Molecular Weight 414.4

Applications GENSCENT OB-1 is a highly effective fluorescent whitening agent in a variety of polymer substrates, especially polyester and polyamide fibers as well as polycarbonate, acrylics, styrene homo- and copolymers including ABS, polyolefins and EVA. Main applications include polyester, polyamide and polypropylene textile fibers, molded articles, films and sheets. GENSCENT OB-1 can be used as tracer in a variety of applications.

Features / Benefits GENSCENT OB-1 features excellent resistance to heat, exceptional Whitening properties, good light fastness and low volatility. It has a brilliant neutral white cast and features good compatibility in various substrates. The product is especially suitable for fibers and films. GENSCENT OB-1 enhances the whiteness of the substrate. In combination with dyes, the product produces particularly bright shades. Its excellent heat resistance renders GENSCENT OB-1 suitable for all relevant processing conditions. It is suitable for packaging applications must be observed. Due to its excellent chemical stability and low volatility, GENSCENT OB-1 is especially suitable for use in polyester polymerization, however, depending on whether DMT or TPA type of synthetic procedure is used different methods of process introduction must be chosen: Details are available on request.

Product Forms

Code:
GENSCENT OB-1

Appearance:
Yellowish crystalline powder

Guidelines for use

The use levels of GENSCENT OB-1 range between 0.005-0.1%, depending on substrate and whitening performance requirements. Standard requirements for polyester fibers are approx. 2.02%. More yellowish products or recycling grades may use concentrations up to 0.035% of product. GENSCENT OB-1 can be used alone or in a variety of blends and combinations with processing, heat and light stabilizers.

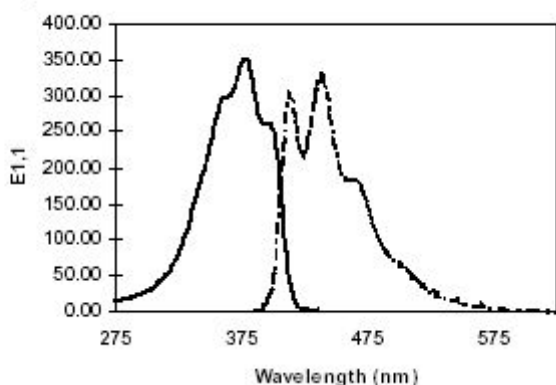
Physical Properties

Melting Range	359±5° C
Specific Gravity (20° C)	1.35
Vapor pressure (20° C)	10E-17 mbar
λ_{\max} (CHCl ₃)	374nm
Solubility	wt.-%
Acetone	<0.01
Chloroform	<0.01
n-Hexane	<0.01
Methanol	<0.01
Water	<0.01
1,1,1-Trichlorethane	<1
N-Methyl-pyrrolidon	<1

Volatility (15mg pure substance; TGA, Heating rate 20° C/min in air)

Weight loss (%)	Temperature(° C)
0.2	300
2.2	350
19.4	400

Absorption and Emission Spectra in DMSO



Handling & Safety

In accordance with good industrial practice, handle with care and prevent contamination of the environment. Avoid dust formation and ignition sources. For more detailed information please refer to the materials safety

data sheet.

Registration

GENSCENT OB-1 is listed on listed on the following inventories

Australia:	AICS	Canada:	DSL	China:	ENCS
Europe:	EINECS	Japan:	MITI	Korea:	ECL
Philippines:	PICCS	USA:	TSCA		

GENSCENT OB-1 is approved for use in food contact applications.

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