

Optical Brightener

1. **Chemical Name** : 2,2-(1,2Ethenediyl-di-4, 1-phenylene) bisbenzoxazole

2. **Specification** :

Molecular Formula	C ₂₈ H ₁₈ N ₂ O ₂	Molecular Weight	414.4
CAS No.	1533-45-5	Melting Point	353 - 359 C
Ash	0.3% max	Odor	Free of Odor
Volatile Content	0.5% max	Assay	99% min
Practical Size	60-200 mesh		
Appearance Yellowish or Yellowish Green Crystal Powder			
Max. Absorption Wavelength : 374 nm(in ethanol)			
Max. Emission Wavelength : 434 nm(in ethanol)			

3. **Properties** :

Optical Brightener functions by absorbing ultraviolet radiation and emitting blue light. The emitted blue light will reduce the yellow color of a polymer.

OB-1 has excellent whiteness in polyester fibers, also widely used in ABS, PS, HIPS, PA, PC, PP, EVA and hard PVC etc.

OB-1 performs excellent resistance to heat, remarkable whitening effects, good light fastness and very low dosage.

4. **Dosage for reference (in each 100g polymer)** :

Transparent : 0.0025-0.005% (2.5g-5g)

Others : 0.0025-0.025% (2.5-25g)

Not more than 0.03% (30g)

The above dosage is for the reference of WHITE color products only. Please decrease when using OB in colorful products. Please increase the dosage when using UV-absorbers.

5. **Improve Whiteness of Recycled Polymer** :

OB-1 will greatly improve the whiteness by providing a more uniform white to the recycled materials. Normal fiber applications require only 200- 300ppm in new polymer, but recycled materials may require as much as 300-450ppm. OB-1 is very effective in improving the appearance of the polymer or fiber. Off-glass or second – quality nylon polymer can also be improved in the same way.

6. **Food Industry Applicable** :

OB-1 complies with regulations, for indirect food additives. OB-1 is restricted to use as an optical brightener for all polymers at a level not to exceed 0.025% by weight of polymer and at the temperatures not to exceed 135 C (275 F).

7. **Attention** : Please mix thoroughly to obtain best effect. OB-1 concentrated master batch can be even better mixed

8. **Safety and sock** : Keeping in stock as ordinary chemicals. Wear protective goggles and gloves while applying. Avoid direct contact with skin and eyes. Soap clean if skin contaminated

9. **Packaging** : 25kg/fiber drum with PE liner

This data is based on technical information available at the time of writing. However, they do not represent a specific guarantee on product performance and it is subject to change if required.