PHILODEN®

Philonol®

Under the trade name PHILONOL, we offer a range of liquid soluble dyes for the coloration of petroleum products, synthetic oils, lubricants, liquids for hydraulic systems and candle wax.

Our products offer high solubility and miscibility with aromatic high-flash systems. Thanks to low viscosity, the liquid dyes can be pumped, poured or metered directly into the medium to be colored.

Key Features

- High Purity; free of any fillers or extenders
- Excellent miscibility in solvents
- Strong coloration capabilities
- Easy to handle; simply stir-in
- Good economics

Product Range

Trade Name	C.I. Name	Trade Name	C.I. Name
PHILONOL® Yellow 14	SOLVENT Yellow 107	PHILONOL® Blue 10	SOLVENT Blue 79
PHILONOL® Yellow 19	SOLVENT Yellow 124	PHILONOL® Blue 14	SOLVENT Blue 98
PHILONOL® Orange 14	SOLVENT Orange 98	PHILONOL® Green 6	SOLVENT Green 33
PHILONOL® Red 7	SOLVENT Red 175	PHILONOL® Bronze	Mixture
PHILONOL® Red 13	SOLVENT Red 19	PHILONOL® Black	Mixture
PHILONOL® Red 17	SOLVENT Red 164		

PHILODEN®

Philowhite®

PHILODEN Industries offers high-molecular brighteners, which find its use in Thermoplastics, Printing Inks, Lacquers and Man-made Fibers. Optical brighteners typically work by reducing the yellowness and improving whiteness. Doing so, they help to enhance the overall brightness of any products. PHILOWHITE OB and OB-1 are products which due to their excellent brightening ability, can be used in a wide range of polymers or any articles made of it. These two grades, based on similar chemistries and molecular weight, just differ by their melting point and weight-loss. Regarding coloristic and polymer suitability, they are exchangeable.

Key Features

- High Efficiency due to excellent Solubility in molten polymer
- Good Heat Stability; no Influence on Processing Properties
- High Resistance to Chemicals
- Adds brightening effect to colored and colorless polymer
- Good Solubility in organic Solvents for Lacquers and Coatings

Technical Performance

Optical Brighteners show the desired effect as long as UV-light is present which delivers the energy needed for the method of action. Without UV-Radiation, the mechanism does not work. Besides the intensity of the UV-radiation, there are three other factors which influence the efficiency of an optical brightener:

1. The initial color of the polymer (colored or colorless)
2. The presence of any matting agents
3. The loading of OB

In determining the optimum concentration of OB. the effect of any other UV-absorbing component of the final formulation in the specific plastic material has to be considered. In combinations with matting agents like TiO_2 or $BaSO_4$, brilliant white shades can be achieved, but such combinations require higher levels of optical brighteners.

On the contrary, the addition of UV-Absorbers can significantly reduce or even nullify the desired effect. Optical brighteners are suitable for a wide selection of polymers; not just EPL's but also for polyolefin.

Typical concentrations for optical brightener can range from as low as 5ppm up to about 1000ppm depending on polymer used, its application and the targeted effect.

In order to develop the desired effect, OB's have to be dissolved in the polymer matrix. Since the addition levels are quite low and in order to make their handling cleaner, they are normally prepared and added as master batch. This is usually achieved by extrusion under the processing conditions required for the carrier material.

For further details, **Call: +91 265 2370122 or Email: info@philoden.com or Visit us at www.philoden.com**