

Hampford Research INC

Handcrafted Solutions For A High-Tech World

TCDM HABI FP 5450

General

For over 40 years, Hampford Research, Inc. has manufactured hexaarylbiimidazole (HABI) based free radical photoinitiators. HRI has been able to improve performance in traditional LED wavelengths (395nm & 405nm). With the right combination of coinitiators and sensitizers, that range can be expanded farther into the visible range. These innovative compounds undergo homolytic cleavage to produce stable lophyl radicals with excellent resistance to oxygen inhibition. With a high molecular weight, HABIs are an excellent choice if trying to avoid migration in the final product.

TCDM HABI is a combination of homo- and heterodimers, predominantly TCDM HABI, but also includes other combinatorial dimers TCTM HABI and o-CI HABI. This collection is what gives TCDM HABI its unique properties, making it ideal for both LED and mercury lamp applications.

Chemical Structure

Product Information

Product Type: Free Radical Generator; Photoinitiator

CAS Number: 100486-97-3

Product Name: 2,2',4-Tris(2-chlorophenyl)-5-(3,4-dimethoxyphenyl)-4,5-

diphenyl-1,1'-biimidazole

Synonyms: 1,1'-Bi-1*H*-imidazole, 2,2',4-tris(2-chlorophenyl)-5-(3,4-

dimethoxyphenyl)-4',5'-diphenyl-

Applications: Photoinitiate Polymerizations; Oxidize Leuco Dyes; Photoresists;

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Graphic Arts Imaging; Coatings

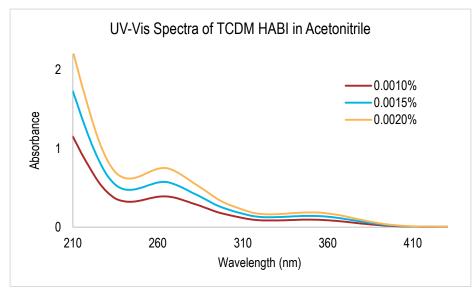
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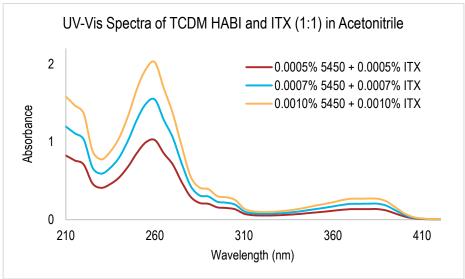
Typical Properties

Appearance: Free Flowing Ochre Powder

Melting Point: 127 - 140°C Molecular Weight: 754.10 g/mole

Absorption Spectrum





Safety and Handling

Keep the container tightly closed. Store in a cool and dark place. Material is photosensitive, do not expose to sunlight or visible light. Handle in a well-ventilated area with suitable protective equipment. Detailed information is provided in the SDS. One year shelf-life when stored at 25°C.