



N-Phenylglycine

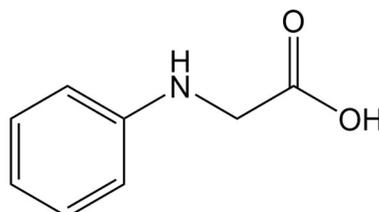
FP5360 – Standard Grade
FP5365 – Low Trace Metals Grade

General

N-phenylglycine (NPG) is a high purity secondary amine synergist, which acts as an efficient hydrogen donor in UV systems. NPG works very efficiently in combination with ketocoumarins for visible light curing as well as a coinitiator for broad spectrum and LED systems.

Research suggests that NPG may be a more efficient hydrogen donor than aminobenzoates (primary amine synergists) in aqueous systems. NPG also has an advantage over tertiary amine synergists, in an aqueous environment, because NPG produces radicals by a decarboxylation process. Tertiary amines, in a traditional Type II electron/proton transfer, rely on radical ion separation, which does not perform as efficiently in aqueous systems.

Chemical Structure



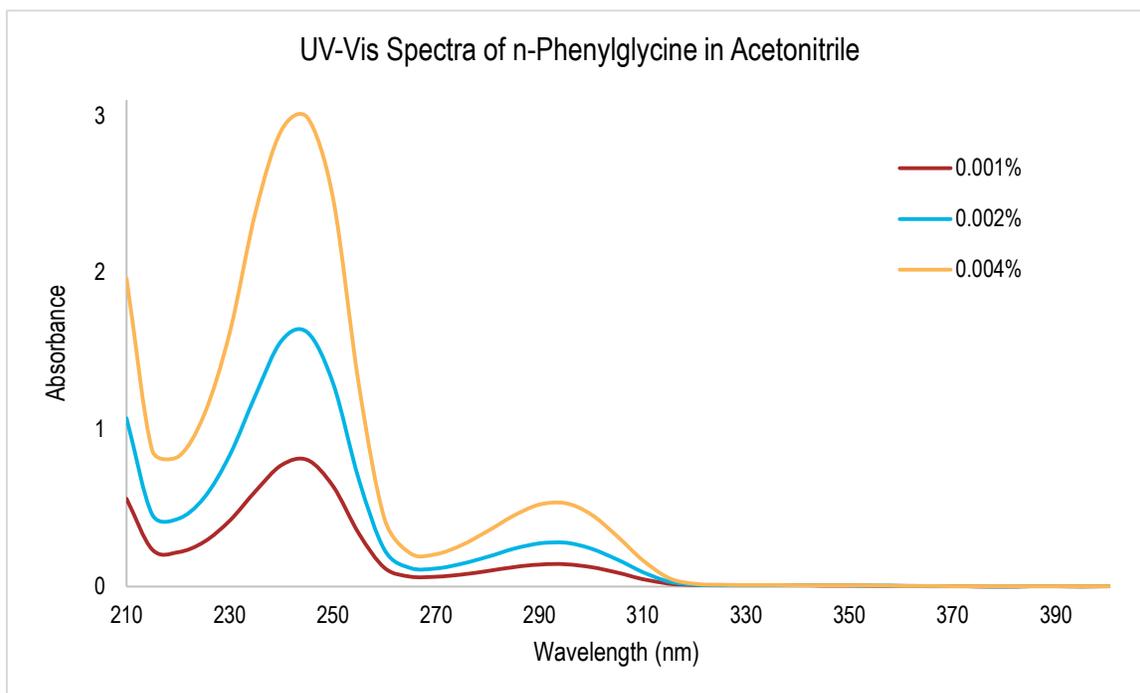
Product Information

Product Type:	Secondary Amine Synergist; Coinitiator
CAS Number:	103-01-5
Product Name:	N-Phenylglycine
Synonyms:	NPG; Anilinoacetic acid; (Phenylamino)acetic acid; Glycine, N-phenyl-;
Applications:	Dental Restoration; General Photoinitiation
Key Features:	High Purity; Water Soluble

Typical Properties

Appearance:	Yellow-Tan Powder
Purity:	98% Minimum
Melting Point:	121-127°C
Molecular Weight:	151.16 g/mole

Absorption Spectrum



Safety and Handling

Keep container tightly closed, away from air and moisture. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Handle in a well-ventilated area with suitable protective equipment. Use local exhaust if dust is generated.

Detailed information is provided in the SDS.

References

Green, W. A. *Industrial Photoinitiators*; CRC Press, 2010

For additional information visit our website www.hampfordresearch.com.