PRODUCT INFORMATION



2-Hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone

Item No. 36428

CAS Registry No.: 106797-53-9

Formal Name: 2-hydroxy-1-[4-(2-hydroxyethoxy)

phenyl]-2-methyl-1-propanone

MF: $C_{12}H_{16}O_4$ FW: 224.3 **Purity:** ≥98%

UV/Vis.: λ_{max} : 219, 275 nm

A solid Supplied as: -20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

2-Hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone is supplied as a solid. A stock solution may be made by dissolving the 2-hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone in the solvent of choice, which should be purged with an inert gas. 2-Hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2-hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone in these solvents is approximately 30 mg/ml.

Description

2-Hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone is a photoinitiator. 1,2 Upon UV activation, 2-hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone dissociates into benzoyl and ketyl radicals, which induce polymerization. It has been used in the synthesis of hyperbranched polymers for various industrial applications, as well as in the synthesis of noble metal nanoparticles.

References

- 1. Choi, G., Oh, Y., Jeong, S., et al. Synthesis of renewable, recyclable, degradable thermosets endowed with highly branched polymeric structures and reinforced with carbon fibers. Macromol. 56(6), 2526-2535 (2023).
- 2. Liu, M., Li, M.-D., Xue, J., et al. Time-resolved spectroscopic and density functional theory study of the photochemistry of Irgacure-2959 in an aqueous solution. J. Phys. Chem. A 118(38), 8701-8707 (2013).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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