1. General

R-gen® 259 is a highly efficient photoinitiator designed specifically for clear UV system. With its unique structure, R-gen® 259 is able to disperse in water and is thus ideal for water-borne applications. In addition, R-gen® 259 does not generate benzaldehyde aftercure, therefore it is highly recommended for odorless application.

2. Properties

Structure:

\[
\text{CHOH}_2\text{CH}_2\text{CO} \quad \text{O} \quad \text{CH}_3 \\
\text{OH} \\
\text{CH}_3
\]

Chemical name: 2-hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-methyl-1-propanone
CAS No.: 106797-53-9
ELINCS No.: 402-670-3
Molecular formula: C_{12}H_{16}O_{4}
Molecular weight: 224.25

3. Physical Data

Appearance: White powder
Odor: Very faint
Melting point: 86 - 90 °C
Boiling point: 331 °C

4. Solubility

(g in 100 ml solvent @20 °C)

- Acetone: 2.5
- Toluene: < 0.1
- Ethyl acetate: 4.0
- Dichloromethane: 4.0
- Acetonitrile: 20.0
- Methanol: > 50
- Water: < 0.1

5. Specification

Appearance: White powder
Assay: 98% min.
Melting point: 86 - 91 °C
Volatiles: 0.5% max.
6. UV Spectrum

[Graph showing UV spectrum for R-gen 259]

7. Packaging

20 kg net/carton box