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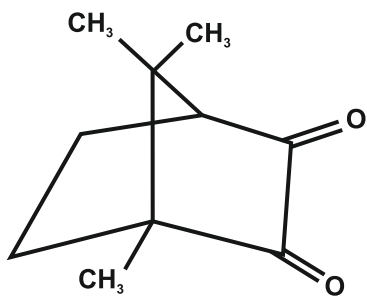
CAMPHORQUINONE

- Camphorquinone Is Used As A Photo Initiator For Resins Utilised For Dental Applications.



CAMPHORQUINONE

• STRUCTURE



• PRODUCT NAME & DETAILS

Camphorquinone

Product Code	: 003290
CAS No.	: 10373-78-1
HS Code	: 2915.90.90
Molecular formula	: C ₁₀ H ₁₄ O ₂
Molecular weight	: 166.220

• SPECIFICATION

Physical Appearance	: Yellow Powder
Melting Point	: 201-203°C
Moisture Content (KF) By Karl Fisher	: NMT 0.5%
Solubility 2.5% in Methanol.	: Clear Solution
Selenium Content By AAS / IPC	: NMT 10 PPM
Identity by FTIR	: Comaptrable with Std.
Volatiles by GC	: NMT 0.20%
Purity by GC	: NLT 99.0%
Camphor (by GC)	: NMT 0.20%
Camphorquinone Anhydride (by GC)	: NMT 0.70%
Camphor Acyloin (by GC)	: NMT 0.10%

• PHOTOGRAPH OF THE PRODUCT



• APPLICATION

1. They are used in Resin based composites (RCB), which are frequently used in Denstry.
2. These Resins are cured by LED lights, which are activated by Photo initiators additive.
3. Camphorquinone is one of the leading photo initiators used in Dental Resin based composites.
4. Camphorquinone contains Selenium content less than 10 PPM therefore it is safe for Dental application.
5. The minimum optimum concentration of camphorquinone in BISGMA/TEGDMA flowable composite is 1 % weight of resin matrix, which allows adequate balance among degree of conversion, depth of cure, mechanical properties and color characteristics of these materials. (Refer Hindawi, BioMed Research International, Volume 2018, Article ID 7921247, 10 pages).
6. STUDIA UBB PHYSICA, Volume 61, (Lx1), 2, 2016, pp 720 Studied the photophysics of photo initiator Camphorquinone bu using time-dependent Density Functional Theory method, i.e. DFT calculations. Adsorption and emission spectra of photo initiator Camphorquinone had been calculated, the calculated electronic absorption energy at 484 nm was in excellent agreement with available experimental data.
7. Biomaterials 24 (2003) 2097-2103 studied the Camphorquinone/amine photo initiator system using blue light emitting diodes. These results suggest that the new LED unit perform better than conventional halogen units with respect to light energy.

• HAZARD CLASSIFICATION

Camphorquinone is Non-hazardous Substance.



• CAPACITY

1 MT Per Month.

• STORAGE CONDITION

Store in closed container at ambient temperature. Avoid direct sunlight.

• PACKING DEATILS

Outer Packing : 25 kg HDPE Open Mouth Drum

Inner Packing : 2 plastic liner with strip seal individually on each liner

• SHELF LIFE

3 Years.

Disclaimer:

Typical properties should not be considered as specification.

Product covered by valid patents are not offered or supplied for commercial use. The Patent position should be verified by the customer.

Products will not be supplied to countries where they could be in conflict with existing patents.

Products currently covered by valid US patents are offered for R&D use in accordance with 35 USC 271 (e) (I)

Above information is given in good faith and without warrenty.

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