

MAYZO

Benacure® 1173

Photoinitiator



“Customer Focused Innovative Solutions”

6577 Peachtree Industrial Blvd. • Norcross, Georgia 30092-3757

Phone: (770) 449-9066 • Fax: (770) 449-9070

www.mayzo.com

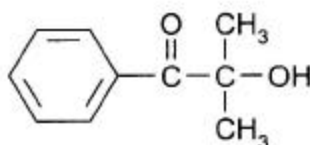
Benacure[®] 1173

Photoinitiator

Introduction: Benacure 1173 is a highly efficient, non-yellowing liquid photoinitiator. It is used for the photopolymerization of UV Curable systems based on acrylic unsaturated oligomers and monomers.

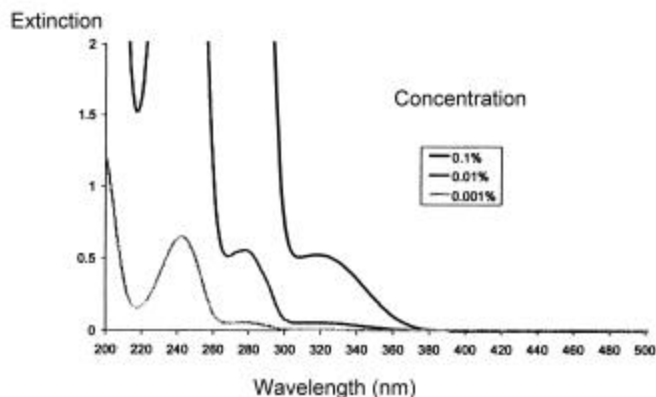
Material Description: Photoinitiator
Chemical Name: 2-Hydroxy-2-methyl-1-phenyl-1-propanone
Empirical Formula: C₁₀H₁₂O₂

CAS #: 7473-98-5
Chemical Structure:



Physical Properties:	Appearance:	Colorless to slightly yellow liquid
	Odor:	slight
	Molecular Weight:	164
	Boiling Point:	105- 115°C (4 – 6.5 mbar)
	Flashpoint:	> 110°C
	Specific Gravity:	1.08
	Solubility:	Soluble in most organic solvents Insoluble in water
	Viscosity (@ 20°C):	23.5 mPas
	Assay:	98.0% min.

Absorption Spectrum:



Applications: Benacure 1173 is especially designed for acrylate UV Curable systems in which very low odor, non-yellowing and color stability after curing are required. It is highly compatible and as a liquid UV curing agent can be easily incorporated as well as suitable for blending with other photoinitiators. To further reduce yellowing of urethane acrylates use in combination with a hindered amine light stabilizer and UV Absorber. Specific applications include: floor tile coatings, adhesives, exterior coatings, coil coating, printing inks, printing plates, and photoresists. It may also be used in clear coatings for wood, plastic, paper, metal, and optical fibers.

Advantages:

- Excellent compatibility with acrylate chemistries
- Minimal yellowing properties
- Exhibits low odor in cured formulations
- Highly reactive which initiates polymerization
- Excellent cure speed, hardness and weatherability

Loading

Instructions:

The loading data and results are based on laboratory work (and field-testing) under controlled conditions and do not necessarily indicate the result that the buyer or user will attain. For this reason we strongly recommend testing of your own system under the actual conditions of processing and end-use prior to full scale testing. The recommended loading concentration is between 1.0% and 6.0% depending on system composition, thickness, desired cure speed, and hardness.

Packaging:

Benacure 1173 is available in a 25 kg (55 pound) black plastic drum, net weight.

Storage:

This product should be stored in original sealed container. This product can form an ignitable vapor/air mixture. Take precautionary measures against static discharges, e.g. by using proper earthing techniques.

Toxicity &

Safety:

Read and understand the Material Safety Data Sheet before using or handling this product.

This material is not intended for use in products for which prolonged contact with mucous membranes or abraded skin, or implantation within the human body is specifically intended, unless the finished product has been tested in Accordance with the Food and Drug Administration and/or other applicable safety testing requirements. Because of wide range of such potential uses, Mayzo, Inc. is not able to recommend this material as safe and effective for such uses and assumes no liability for any such uses.

The information contained herein is believed to be reliable. However, Mayzo, Inc. makes no warranty, whether expressed or implied, including warranties of merchantability or of fitness for a particular purpose, for the product or products referred to herein. No statements or recommendations contained herein are to be constructed as inducements to infringe any relevant patent, now or hereafter existence. Under no circumstances shall Mayzo, Inc. be liable for incidental, consequential, or other damages from alleged negligence, breach of warranty, strict liability, or any other legal theory, arising out of the use of handling of the product or products referred to herein. The sole remedy of the buyer and sole liability of Mayzo, Inc. for any claims shall be limited to the buyers purchase price of the product which is subject of the claim or the amount actually paid for each product, whichever is less. Technical advice furnished by seller shall not constitute a warranty, which is expressly disclaimed, all such advice being given and accepted at the buyers risk.