



PHOTOMER[®] 4771

Amine Modified Acrylate

Product Data Sheet

General Information

PHOTOMER[®] 4771 is an amine modified diacrylate which exhibits moderate viscosity, low odor and excellent monomer/oligomer compatibility.

This amine synergist will enhance the cure characteristics as well as adhesion properties when properly formulated with photosensitizing initiators such as benzophenone.

Specification

Appearance	Visual	Amber clear liquid
Viscosity @ 25 °C	Brookfield, ISO 2555	400 - 1,000 mPa·s
Colour (Gardner)	ISO 4630	≤ 3
Amine Value	ISO 660	125 - 140 mg KOH/g

Additional Data

Specific gravity @ 25 °C 1.100 g/cm³

Application

PHOTOMER[®] 4771 is a low odour, less toxic alternative to conventional amines in UV curable systems. It reduces the level of non-reactive/non-curable components in a formulation and thus improves the resistance properties of cured films.

Amine synergists, such as PHOTOMER[®] 4771, have proved to be very useful in topcoat and varnish formulations where the use of "free" amines can result in the phenomenon known as "blooming".

PHOTOMER[®] 4771 is useful in UV curable formulations for paper and paperboard where improved cure and adhesion properties are required. It can be used in both clear overprint varnishes as well as pigmented systems that are applied by roller coat, curtain coat or any other conventional coating mechanism. Following are formulation recommendations for PHOTOMER[®] 4771.

Formulation Suggestions for PHOTOMER® 4771

<u>Formulations</u>	Paper	Wood	Matte Wood
PHOTOMER® 3016	30	30	30
PHOTOMER® 4061	20	16	18
PHOTOMER® 4094	30	16	23
PHOTOMER® 4771	15	5	14
Omnirad BP Flakes	3	—	3
Omnirad BDK	2	—	2
Omnirad ITX	—	2	—
Titanium Dioxide ¹	—	31	—
Syloid 169 ²	—	—	10

Properties

Viscosity at 25 °C, mPa·s	550	2052	2300
Cure speed, m/min	30	6.1	22.9
Film thickness, µm	25	12.5	25
Scuff resistance	good	good	good
Pencil hardness	6H	4B	6H
Solvent resistance (MEK double rubs)	100 +	15	100 +
Adhesion (#600 Cellotape), %	100	100	100
Gloss 60°	—	—	25

¹ DuPont R902

² GraceDavidson

Storage & Handling

Storage must be in a cool, shaded, well ventilated and dry area away from direct sources of heat and sunlight. PHOTOMER® 4771 may congeal or stratify if cold. Allow to warm to room temperature and mix well before using.

Subject to appropriate storage under the usual storage and temperature conditions, our products are durable for at least 6 months.

PHOTOMER® 4771 should be handled in accordance with good industrial practice. Further information is provided in the material safety data sheet which is available on request.

Regulatory Status

TSCA (USA), EU (Europe), IECSC (China), DSL (Canada), AICS (Australia), NZIoC (New Zealand), ECL (Korea), TCSI (Taiwan)

Packaging

PHOTOMER® 4771 is available in 55 gallon (200 liter) lined tighthhead steel drums.

Disclaimer

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