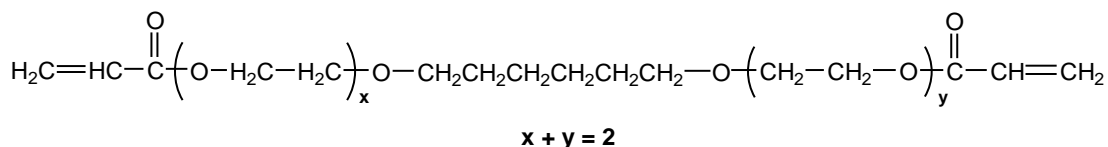


Product Data Sheet

General Information

PHOTOMER[®] 4361 is an ethoxylated analogue of 1,6-hexanediol diacrylate (PHOTOMER[®] 4017). It is a very low irritation monomer which can be substituted for HDDA due to its comparable solvency characteristics. This monomer can be used as a high performance diluent in UV/EB energy curable coatings and inks.

Chemical Description



Specification

Appearance	Visual	Clear water-white liquid
Viscosity @ 25 °C	Brookfield, ISO 2555	10 - 20 mPa·s
Colour (APHA)	ISO 6271	≤ 250
Acid Value	ISO 660	≤ 0.5 mg KOH/g
Moisture content	Karl Fischer, ISO 4317	≤ 0.5 %
Solvent content	GC Analysis	≤ 0.04 %

Additional Data

Acronym	EOHDDA/HDEODA
Weight/Gallon @ 25 °C	8.5 lbs
Flash Point	> 200 °F
Inhibitor	300 ppm MEHQ
Draize (Scale: 0 - 8)	< 2
Molecular Weight	314 g/mol
Refractive Index @ 20°C	1.4600
Surface Tension @ 25°C	37.5 dynes/cm

Application

PHOTOMER® 4361 exhibits similar solvency characteristics and film properties as compared to standard HDODA, therefore it is recommended as a direct replacement for HDDA in most formulations. Also, PHOTOMER® 4361 registers a much lower draize value (< 2) versus HDDA (< 6) which provides the formulators with a safer, lower skin irritation alternative to HDDA when formulating. This high performance diluent is recommended for all UV/EB coating and ink applications across the scope of the industry.

Coatings for PVC

	A	B
PHOTOMER® 6210	13.0	13.0
PHOTOMER® 4017 (HDDA)	33.0	---
PHOTOMER® 4361 (EOHDDA)	---	33.0
PHOTOMER® 4771	6.0	6.0
Omnirad® BP Flakes	4.5	4.5
PHOTOMER® 4006	40.0	40.0
Omnirad® BDK	3.5	3.5

Properties

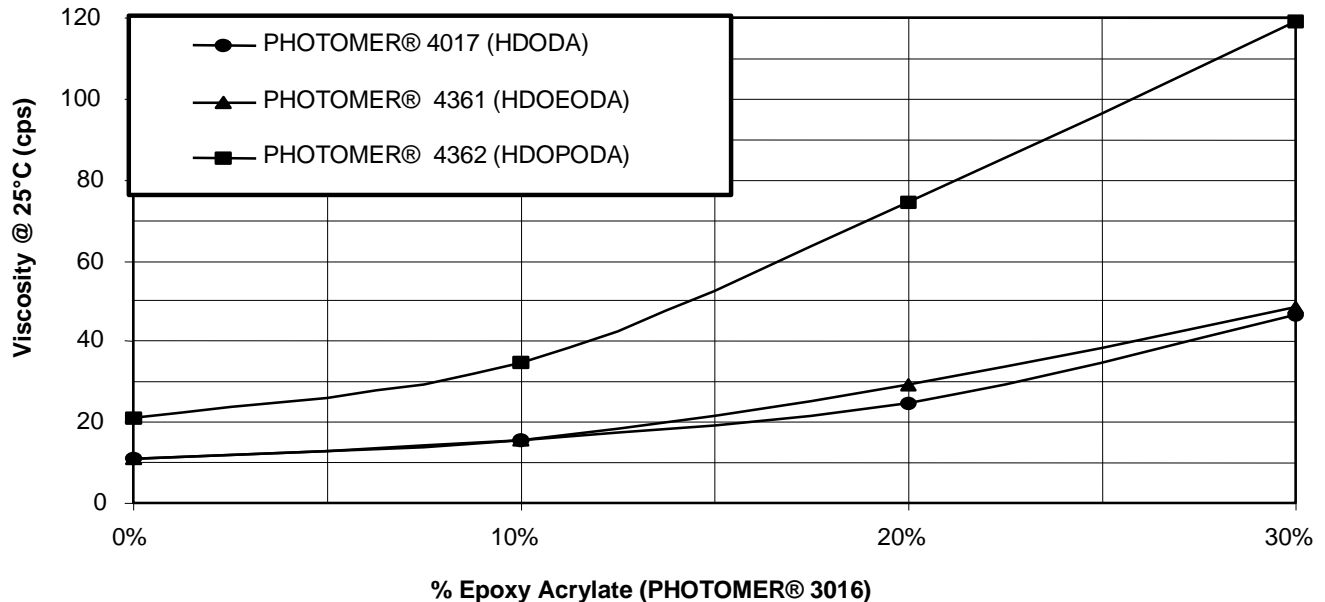
Viscosity @ 25 °C, mPa·s	385	392
Gloss 60°	98	98
Adhesion (600 Cellotape)	100 %	100 %
Pencil Hardness	6H	6H

Cure Conditions:

RDS Coating Rod #3;
 0.27 mils wet film thickness;
 100 ft/min ;
 one 300 watt/inch UV lamp (H bulb).

Viscosity Reduction Curves

PHOTOMER® 4361 is comparable to HDDA in reducing the viscosity of a standard bisphenol A epoxy acrylate system over the normal concentration range.



Storage & Handling

Storage must be in a cool, shaded, well ventilated and dry area away from direct sources of heat and sunlight. PHOTOMER® 4361 may crystallize or stratify if subjected to cold or freezing conditions. 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 12 months.

PHOTOMER® 4361 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), NDSL (Canada), NZIoC (New Zealand), ECL (Korea), TCSI (Taiwan)

Packaging

PHOTOMER® 4361 is available in 55 gallon (200 liter) lined tighthead steel drums.

Disclaimer

The information presented in this data sheet is given in good faith and is based on the material available to us at the time of writing. The information is not to be taken as a warranty or representation for which we assume legal responsibility, nor as permission or recommendation to practice any patented invention without a license. It is offered solely for consideration, investigation and verification.