

### Product Data Sheet

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#### General Information

PHOTOMER® 5429 is a low viscosity tetra functional polyester acrylate oligomer. When exposed to UV/EB radiation, this product cures rapidly and has good adhesion particularly to metal substrates. PHOTOMER® 5429 is recommended for use in UV/EB clear and pigmented systems.

#### Specification

<b>Appearance</b>	<b>Visual</b>	<b>Clear water-white liquid</b>
<b>Viscosity @ 25 °C</b>	<b>Brookfield, ISO 2555</b>	<b>300 - 500 mPa·s</b>
<b>Colour (Gardner)</b>	<b>ISO 4630</b>	<b>≤ 2</b>
<b>Acid Value</b>		<b>≤ 25 mg KOH/g</b>
<b>Moisture content</b>	<b>Karl Fischer, ISO 4317</b>	<b>≤ 0.4 %</b>
<b>Solvent content</b>	<b>GC Analysis</b>	<b>≤ 0.5 %</b>

#### Additional Typical Properties

Inhibitor	500 ppm MEHQ
Refractive Index @ 20°C	1.4700
Tensile Strength	1870 psi
Elongation	10 %

#### Application

PHOTOMER® 5429 is a low viscosity, low colour tetra functional polyester acrylate oligomer. It exhibits excellent pigment wetting, flow and levelling characteristics in a variety of UV/EB applications due to its low surface tension. PHOTOMER® 5429 is fast curing and it imparts enhanced adhesion, hardness and scuff resistance in UV/EB coatings and inks as compared to other standard polyester acrylate oligomers. PHOTOMER® 5429 is recommended for use in gravure, screen and flexo ink applications, and in multi-colour printing applications where intercoat adhesion is difficult to achieve. It is also recommended for use in spray and clear coatings for metal, paper, wood, and plastics, and as a functional diluent for other high viscosity oligomers.

Formulated product properties will depend on the actual reactive monomers, oligomers and additives utilized.

## Features & Benefits

Film Properties of PHOTOMER® 5429 cured with 4% Omnirad 73.

Gloss 60°	> 90
Adhesion (#600 Cellotape)	Excellent
Pencil Hardness	6H
Solvent Resistance (MEK Double Rubs)	50
Scuff Resistance	Good

Curing conditions:

Applied on QP panel by RDS Rod #3; 6.8 µm wet film thickness; cured with one 300 watt/inch UV lamp at 50 ft/min.

## Storage & Handling

Storage must be in a cool, shaded, well ventilated and dry area away from direct sources of heat and sunlight. PHOTOMER® 5429 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 24 months.

PHOTOMER® 5429 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), Taiwan

## Packaging

PHOTOMER® 5429 is available in 55 gallon (200 liter) lined tighthhead steel drums.

Disclaimer

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