

We Enable the transformation of Light for a Better Future



# PureLine

## Product guide



### **ENERGY CURING RAW MATERIAL AND TECHNICAL SOLUTION PROVIDER**

IGM Resins is the leading global provider of energy curable raw material solutions to a wide variety of industries such as graphic arts, industrial coatings, adhesives and 3D printing. The combination of our global presence, unique market driven and customer focused approach, technical and regulatory support, and our comprehensive portfolio of products covering photoinitiators, monomers, oligomers and additives, is the cornerstone of our success.

Our dedication to energy curing technology and the markets we serve is emphasized by the development of next generation

products for innovative integrated solutions, and ongoing investment into state-of-the-art manufacturing capabilities.

### **HOW TO GET MORE FROM US CARBON FOOTPRINT**

Next to social development and economic growth, environmental protection is a key pillar of IGM Resins' sustainability strategy, which are all critical in shaping a better future for generations to come. We are always looking at ways to improve the carbon footprint of our processes and products.

### **WASTE REDUCTION AND ENERGY OPTIMIZER**

We define and implement Operational Excellence initiatives at our global manufacturing sites.



We cannot afford to waste our planet's valuable resources – which is why we continuously review our approach to waste reduction and energy optimization.

### **RESPONSIBLE MANAGEMENT OF HARMFUL SUBSTANCES**

At IGM Resins, nothing is a higher priority than the health and safety of people. In line with our purpose and recently launched sustainability strategy, we are leading the UV industry in the elimination of harmful substances.

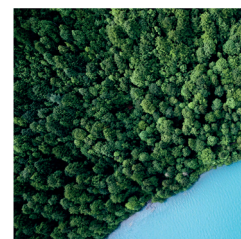
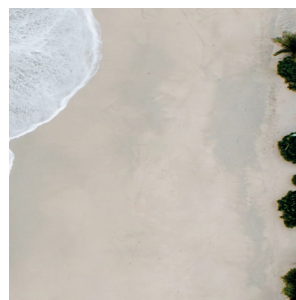
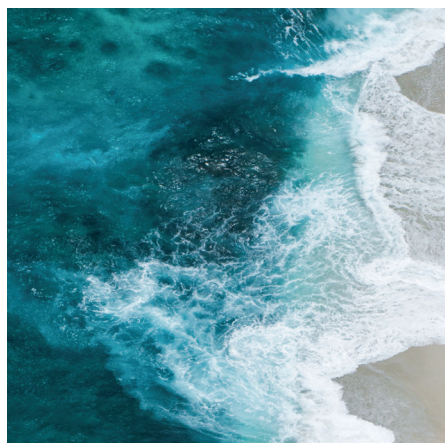
By working closely with partners and suppliers, and by optimizing its production processes, IGM Resins is making fast progress in eliminating unintendedly created substances from its product portfolio.

### **BIO-BASED CONTENT**

Bio-based raw materials are a good way to reduce the carbon footprint of products. It's important to gauge the actual bio-based content using biogenic carbon fraction determination: Carbon-14 (14C) measurement, in line with ASTM D6866-21. This way, we can ensure we always choose the right products and contribute to a better, more sustainable world.

Environmental protection is a key pillar of IGM Resins' sustainability strategy, which is critical in shaping a better future for generations to come. Select our Pureline™ products for a more sustainable world.





Chemical Identity

Cas No.

Biobased  
content | ASTM  
D 6866-21

Functionality

Typical  
Viscosity |  
mPa.s at 25 °C

Colour |  
APHA max

Tg | °C

## MONOFUNCTIONAL MONOMERS

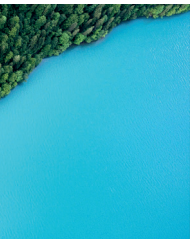
PureOmer 4012	Isobornyl acrylate (IBOA)	5888-33-5	78	1	10	50	88
PureOmer 4812	Lauryl acrylate (LA)	2156-97-0	81	1	7	200	-3

## TRI- AND HIGHER FUNCTIONAL MONOMERS

PureOmer 4094	Glyceryl [4 PO] triacrylate(GPTA)	52408-84-1	14	3	85	100	33
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## METHACRYLATES

PureOmer 2012	Isobornyl methacrylate (IBOMA)	7534-94-3	72	1	6	50	150
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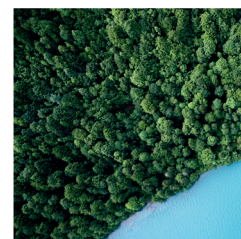
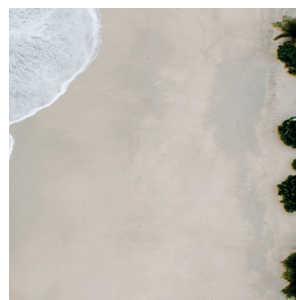
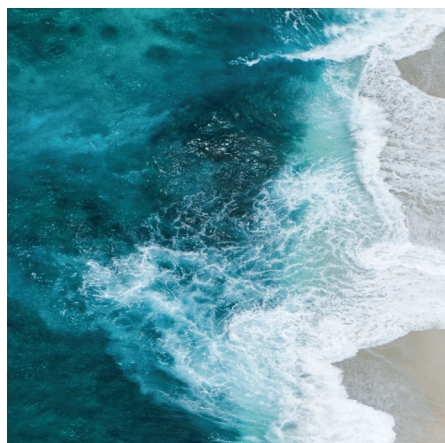


Surface  
Tension 25°C |  
m n/m

Product Attributes

Reactivity  
Hardness  
Flexibility  
Yellowing  
Resistance  
Adhesion  
Pigment  
Wetting

32	Solvency, adhesion, good flexibility, thermoforming	••	•	••	••	•••	•
30	Flexibility, hydrophobic, good adhesion, low shrinkage, high renewable content	•		•••	••	••	
33	Pigment wetting, flexibility, impact resistance	•••	••	••	••	•	•••
31	Adhesion, flexibility, low shrinkage, abrasion resistance, high Tg	•	•	••		•••	



### Chemical Identity

Biobased  
content | ASTM  
D 6866-21

Functionality

Typical  
Viscosity |  
mPa.s at T °C

T | °C

Colour |  
Gardner max

Tensile  
Strength | psi

Elongation | %

## EPOXY ACRYLATES

PureOmer	Chemical Identity	Biobased content   ASTM D 6866-21	Functionality	Typical Viscosity   mPa.s at T °C	T   °C	Colour   Gardner max	Tensile Strength   psi	Elongation   %
PureOmer 3005	Acrylated epoxy soy oil (ESBOA)	84	2	20000	25	7	1150	16

## POLYESTER ACRYLATES

PureOmer	Chemical Identity	Biobased content   ASTM D 6866-21	Functionality	Typical Viscosity   mPa.s at T °C	T   °C	Colour   Gardner max	Tensile Strength   psi	Elongation   %
PureOmer 5433	Polyester tetraacrylate	47	4	4500	60			
PureOmer 5437	Polyester tetraacrylate	14	4	9500	25	5		
PureOmer 5443	Polyester hexaacrylate	46	6	32500	25			
PureOmer 5450	Fatty acid modified polyester hexaacrylate	40	6	9500	25	15		

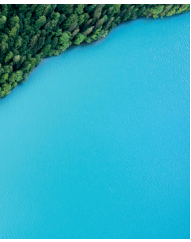
## POLYETHER ACRYLATES

PureOmer	Chemical Identity	Biobased content   ASTM D 6866-21	Functionality	Typical Viscosity   mPa.s at T °C	T   °C	Colour   Gardner max	Tensile Strength   psi	Elongation   %
PureOmer 5662	Amine modified polyether acrylate	14	4	3000	25	1		
PureOmer 5850	Amine modified polyether acrylate	18	2.5	105	25	2		

Our technical team is here to offer you support and advice to help you meet your goals. For our full product range, please refer to the UV/EB Radcure Product Guide or visit our website.

#### Disclaimer:

The information in this overview is presented in good faith and believed to be correct, but is provided on the condition that persons receiving it will make their own assessment on its correctness referring to the latest version of official documentation (e.g. safety data sheet).



T<sub>g</sub> | °C

Product Attributes

Reactivity  
Hardness  
Flexibility  
Yellowing Resistance  
Adhesion  
Pigment Wetting

T <sub>g</sub>   °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
8	Flexibility, excellent pigment wetting	•	•	••	••	•	•••
	Pigment wetting, litho properties, abrasion resistance, toughness	••	•	•••			•••
	Excellent pigment wetting, good adhesion, scratch resistance, high gloss	••	••	••		•••	•••
	High reactivity, PETA and PETIA free, good litho performance	•••	•••	••	•	•	•••
17	High reactivity, litho properties, pigment wetting	•••	••	••	•		•••
	Adhesion, flexibility, coating hardness	•••	••	•••	••	••	••
20	Low viscosity, high reactivity	•••	••	•••	••	••	••

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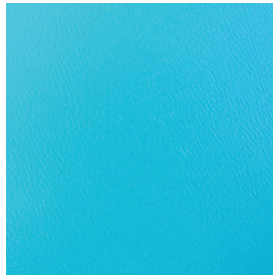
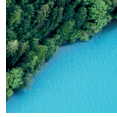
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