







PureLine™

Product guide V.5





### 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 HOW TO GET MORE FROM US of industries such as graphic arts. industrial coatings, adhesives and Next to social development and 3D printing. The combination of our global presence, unique market driven and customer focused approach, technical and regulatory support, and our comprehensive future for generations to come. portfolio of products covering photoinitiators, monomers, improve the carbon footprint of our oligomers and additives, is the cornerstone of our success.

Our dedication to energy curing OPTIMIZER technology and the markets We define and implement we serve is emphasized by the Operational Excellence initiatives development of next generation

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

## **CARBON FOOTPRINT**

economic growth, environmental protection is a key pillar of IGM Resins' sustainability strategy, which are all critical in shaping a better We are always looking at ways to processes and products.

## WASTE REDUCTION AND ENERGY

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 harmfull substances.

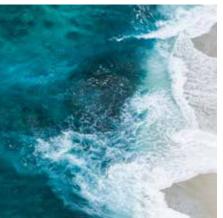
By working closely with partners and suppliers, and by optimizing its production processes, IGM Resins is making fast progress in eliminating unintendedly created substances from its product portfolio.

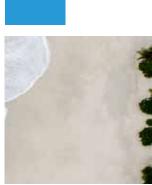
### **BIO-BASED CONTENT**

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	<u>ا</u> - -
MONOFUNCTI	ONAL 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 HIG							
PureOmer™ 4094	Glyceryl [4 PO] triacrylate(GPTA)	52408-84-1	14	3	85	100	33
METHACRYLA	ATES						
PureOmer™ 2012	Isobornyl methacrylate (IBOMA)	7534-94-3	72	1	6	50	150





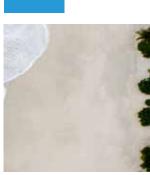




Surface Tension 25°C   m n/m	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
32	Solvency, adhesion, good flexibility, thermoforming	••	•	••	••	•••	•
30	Flexibility, hydrophobic, good adhesion, low shrinkage, high renewable content	•		•••	••	••	
33	Pigment 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	<b>○</b>   <b>⊢</b>	Colour   Gardner max	Tensile Strength   psi	Elongation   %
EPOXY ACRYI	_ATES							
PureOmer <sup>™</sup> 3005	Acrylated epoxy soy oil (ESBOA)	84	2	20000	25	7	1150	16
PureOmer <sup>™</sup> 3026	Epoxy diacrylate	21	2	6000	60	1		
PureOmer <sup>™</sup> 3026- 20G	Epoxy diacrylate diluted with 20% GPTA	19,6	2	85000	25	1		
PureOmer <sup>™</sup> 3026- 40G	Epoxy diacrylate diluted with 40% GPTA	18,2	2	9000	25	1		
POLYESTER A	CRYLATES							
PureOmer <sup>™</sup> 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 <sup>™</sup> 5450	Fatty acid modified polyester hexaacrylate	40	6	9500	25	15		
POLYETHER ACRYLATES								
PureOmer <sup>™</sup> 5662	Amine modified polyether acrylate	14	4	3000	25	1		
PureOmer <sup>™</sup> 5850	Amine modified polyether acrylate	18	2.5	105	25	2		





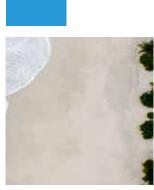




<u>.</u>	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
8	Flexibility, excellent pigment wetting	•	•	••	••	•	•••
	High reactivity, low odor, chemical resistance, improved flexibility	••	•••	•	•	•	••
	High reactivity, low odor, chemical resistance, improved flexibility	•••	•••	•	•	•	••
	High reactivity, low odor, chemical resistance, improved flexibility	•••	•••	•	•	•	••
	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	•••	••	•••	••	••	••









Description	Biobased content   ASTM D 6866-21	Active content   %							
LOW MOLECULAR WEIGHT DISPERSANT									
Water and solvent borne systems. Strong anti-settling effects.	53	52							
High molecular weight carboxylic acid salts	100	100							
High molecular weight unsaturated carboxylic acid	84	98							
MOLECULAR WEIGHT DISPERSANT									
Hybrid dispersant to improve compatibility and color acceptance of universal colorants in base paints	55	100							
Hybrid dispersant for universal colorants for tinting systems	29	100							
Hybrid dispersant for oil and solvent-based systems and colorants. Also for heatset and offset inks	55	100							
Hybrid dispersant for universal colorants for tinting systems, VOC FREE and low viscosity pumpable dispersant.	29	100							
	LAR WEIGHT DISPERSANT  Water and solvent borne systems. Strong anti-settling effects.  High molecular weight carboxylic acid salts  High molecular weight unsaturated carboxylic acid  MOLECULAR WEIGHT DISPERSANT  Hybrid dispersant to improve compatibility and color acceptance of universal colorants in base paints  Hybrid dispersant for universal colorants for tinting systems  Hybrid dispersant for oil and solvent-based systems and colorants. Also for heatset and offset inks  Hybrid dispersant for universal colorants for tinting systems, VOC FREE and	Description  LAR WEIGHT DISPERSANT  Water and solvent borne systems. Strong anti-settling effects.  53  High molecular weight carboxylic acid salts  100  High molecular weight unsaturated carboxylic acid  84  MOLECULAR WEIGHT DISPERSANT  Hybrid dispersant to improve compatibility and color acceptance of universal colorants in base paints  55  Hybrid dispersant for universal colorants for tinting systems  29  Hybrid dispersant for oil and solvent-based systems and colorants. Also for heatset and offset inks  Hybrid dispersant for universal colorants for tinting systems, VOC FREE and							

Our technical team is here to offer you support and advice to help you meet your goals. For our full product 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 its correctness referring to the latest version of official documentation (e.g. safety data sheet).









Inorganic   % dosage active material based on pigment	Organic   % dosage active material based on pigment	Bentonite   % dosage active material based on bentonite	Solvent borne coatings	Water borne coatings	Energy Curing coatings
0.5-2.0	2.5-5.0		•	•	
0.25-1.0		15.0-25.0	•	•	
0.25-1.25				•	
5–10	10-20	15-25	•	•	
5–10	10-20	15-25	•	•	
5–10	10-20		•		
5–10	10-20	15-25	•	•	•

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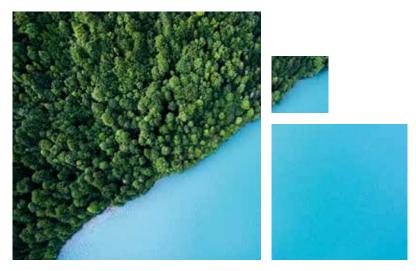
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For IGM's global network of officially appointed agents, please visit our website www.igmresins.com





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