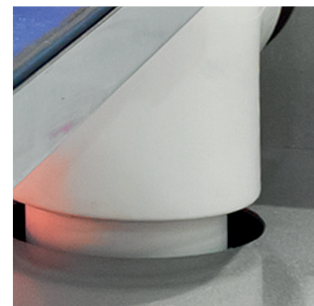


Energy  
Curing  
—  
Product  
guide



We Enable the Transformation of Light for a Better Future.



# ENERGY CURING

## Product guide



### ENERGY CURING RAW MATERIAL AND TECHNICAL SOLUTION PROVIDER

IGM Resins is the leading global provider of Energy Curing 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, Energy Curing Resins and Additives is the cornerstone of our success. We offer worldwide technical application support, product development and customized solutions.

IGM is 100% dedicated to the energy curing coatings industry, and we are

investing to grow with it. We are expanding our capabilities in R&D, product development and manufacturing to better serve you and partner with you in developing next generation photoinitiators and other UV materials.

### WE ENABLE THE TRANSFORMATION OF LIGHT FOR A BETTER FUTURE

This product catalogue gives details of all the products currently offered to the Energy Curing industry by IGM Resins.



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.

### HOW TO GET MORE FROM US

Our network of offices and distribution centers globally are established in all major energy curing markets to offer customer-focused and efficient supply. Our customer service is world class. Application and product development laboratories are available to provide customers with technical support and formulation advice.

Whatever your UV application, the IGM Resins technical service team is on hand to provide support with radcure formulation challenges. If we don't have the right product, we can work with you to develop one.

### TABLE OF CONTENTS

Photoinitiators	4
Energy Curing Resins	12
Cationics	28
Additives	30
PureLine™	34
Technical support	36
Contact information	38



	Chemical Identity	Cas No.
<b>Omnirad 1173</b>	2-hydroxy-2-methyl-1-phenylpropanone	7473-98-5
<b>Omnirad 184*</b>	1-hydroxycyclohexyl-phenyl ketone	947-19-3
<b>Omnirad 127</b>	2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one	474510-57-1
<b>Omnirad 2959</b>	1-[4-(2-hydroxyethoxy)-phenyl]-2-hydroxy-methylpropanone	106797-53-9
<b>Omnirad 369</b>	2-benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone	119313-12-1
<b>Omnirad 379</b>	2-dimethylamino-2-(4-methyl-benzyl)-1-(4-morpholin-4-yl-phenyl)-butan-1-one	119344-86-4
<b>Omnirad 601</b>	Difunctional alpha hydroxy ketone	71868-15-0
<b>Omnirad 907*</b>	2-methyl-1-[4-(methylthio)phenyl]-2-morpholinopropan-1-one	71868-10-5
<b>Omnirad 4265</b>	Omnirad TPO (50% wt) and Omnirad 1173 (50% wt)	75980-60-8 + 7473-98-5
<b>Omnirad 1000</b>	Omnirad 1173 (80% wt) and Omnirad 184 (20% wt)	7473-98-5 + 947-19-3
<b>Omnirad BDK</b>	2,2-dimethoxy-2-phenylacetophenone	24650-42-8
<b>Omnirad 403</b>	Bis(2,6-dimethoxybenzoyl)-2,4,4-trimethylpentylphosphine oxide	145052-34-2
<b>Omnirad 1700</b>	Omnirad 403 (25% wt) and Omnirad 1173 (75% wt)	145052-34-2 + 7473-98-5
<b>Omnirad 1870</b>	Omnirad 403 (70% wt) and Omnirad 184 (30% wt)	145052-34-2 + 947-19-3
<b>Omnirad TPO**</b>	2,4,6-trimethylbenzoyl-diphenyl phosphine oxide	75980-60-8
<b>Omnirad TPO-L</b>	Ethyl(2,4,6-trimethylbenzoyl)-phenyl phosphinate	84434-11-7
<b>Omnirad 819</b>	Bis(2,4,6-trimethylbenzoyl)phenylphosphine oxide	162881-26-7
<b>Omnirad 819 DW</b>	Omnirad 819 DW is a dispersion of 45% bis-acylphosphine oxide in water	
<b>Omnirad 2022</b>	Blend of Omnirad 1173 + Omnirad TPO-L + Omnirad 819	

\* Products available as Flakes version

\*\* High purity and Electronic grade available



Molecular Weight   g/mol	Melting Point   °C	UV-absorption (lambda max)   nm	Through Cure	Surface Cure	Clear Systems	White Systems	Pigmented Systems	LED Cure	Water-based Systems
164.2	Liquid at room temperature	244, 330	..	...	...	...	..	.	...
204.3	44-50	243, 331	..	...	...	...	..	.	..
340.4	82-90	243, 332	..	...	...	...	..	.	.
224.3	86-90	274, 330	..	...	...	...	..	.	...
366.5	110-114	232, 323	...	..	.	.	...	..	
380.5	88-93	233, 320	...	..	.	.	...	..	
342.4	≥ 96	275	...	...	...	...	...	...	
279.4	73-76	230, 303	...	..	..	..	...	..	
	Liquid at room temperature	239, 275, 379	...	...	...	...	..	.	..
	Liquid at room temperature	280, 325	..	...	...	...	.	.	..
256.3	64-67	252, 325	...	...			...	.	
490.5	105-119	300, 350	...	.	.	...	...	...	.
	Liquid at room temperature	244, 300, 350	...	.	..	...	...	..	.
	≥ 87	300, 331, 350	...	..	..	...	..	.	..
348.4	91-94	275, 379	...		...	...	..	...	.
316.4	Liquid at room temperature	230, 275, 370	...	.	..	...	..	...	..
418.5	127-133	237, 275, 380	...	.	..	...	...	...	.
	Liquid at room temperature	237, 275, 380	...	.	..	...	...	...	...
	Liquid at room temperature	245, 285, 370	...	.	...	...	...	...	.



	Chemical Identity	Cas No.
Omnirad 2100	Blend of Omnirad 819 + Omnirad TPO-L	
Omnirad 754	Blend of oxy-phenyl-acetic acid 2-[2-oxo-2-phenyl-acetoxy-ethoxy]-ethyl ester and oxy-phenyl-acetic acid 2-[2-hydroxy-ethoxy]-ethyl ester	
Esacure KIP 150	Oligomeric alpha hydroxy ketone 100%	163702-01-0
Esacure KIP 100 F	Oligomeric alpha hydroxy ketone (70% wt) and 2-hydroxy-2-methylpropiophenone (30% wt)	163702-01-0 + 7473-98-5
Esacure KIP 75 LT	Oligomeric alpha hydroxy ketone (75% wt) and tripropylene glycol diacrylate (25% wt)	163702-01-0 + 42978-66-5

## PHOTOINITIATORS - TYPE II

Omnirad BP Flakes	Benzophenone	119-61-9
Omnirad 4MBZ Flakes	4-methyl benzophenone	134-84-9
Omnirad 4PBZ	4-phenyl benzophenone	2128-93-0
Omnirad OMBB	Methyl-o-benzoylbenzoate	606-28-0
Omnirad BMS	4-(4methylphenylthio)benzophenone	83846-85-9
Omnirad 500	Omnirad BP (50% wt) and Omnirad 184 (50% wt)	119-61-9 + 947-19-3
Omnirad 991	2-ethylhexyl 2-([1,1'-biphenyl]-4-ylcarbonyl)benzoate	75005-95-7
Esacure 3644	Ketocoumarin	2243703-91-3
Esacure TZM	Liquid mixture of benzophenone (50%) and 4-methylbenzophenone (50%)	119-61-9 + 134-84-9
Esacure TZT	Liquid eutectic mixture of 2-4-6 trimethylbenzophenone and 4 methylbenzophenone	954-16-5 + 134-84-9
Omnirad DETX	2,4-diethylthioxanthone	82799-44-8
Omnirad ITX	2-isopropyl thioxanthone	5495-84-1
Omnirad MBF	Methylbenzoylformate	15206-55-0
Omnirad EMK	4,4'bis(diethylamino) benzophenone	90-93-7

Molecular Weight   g/mol	Melting Point   °C	UV-absorption (lambda max)   nm	Through Cure	Surface Cure	Clear Systems	White Systems	Pigmented Systems	LED Cure	Water-based Systems
	Liquid at room temperature	220, 275, 370	...	.	...	...	...	...	.
	Liquid at room temperature	260, 340	..	..	...	...			
	Liquid at room temperature	260	...	...	.	.	.		.
	Liquid at room temperature	260	...	...	.	.	.		.
	Liquid at room temperature	260	...	...	.	.	.		.
182.2	45-49	251, 333	.	...	..	..	..		..
196.3	54-58	245, 330	..	...	..	..	..		..
258.3	99-103	285	..	...	..	..	..		..
240.3	48-54	253, 282		...	..	..	..		..
304.4	75-85	252, 325	..	...	...	..	..		..
	Liquid at room temperature	248, 338	..	..	..	..	.		...
414.5	Liquid at room temperature	290	..	...	...	..	..		..
	68-71	325, 375	...	...	...		...	...	
	Liquid at room temperature	320, 260	...	...	...	..	..		..
	Liquid at room temperature	250, 330	..	...	...	..	..		..
268.4	71-74	261, 385	...	..			...	...	
254.3	70-76	255, 384	...	..			...	...	
164.2	Liquid at room temperature	255, 325		...	...	..	.		...
324.5	93-96	324,5	...	...			...	...	..

## Chemical Identity

## Cas No.

## POLYMERIC PHOTOINITIATORS FOR SENSITIVE APPLICATIONS

Omnipol 910	Piparazino based aminoalkylphenone type I photoinitiator	886463-10-1
Omnipol 9210	Piparazino based aminoalkylphenone type I photoinitiator diluted in PPTTA	886463-10-1 + 51728-26-8
Omnipol 2702	Polymeric benzophenone derivative type II photoinitiator	1246194-73-9
Omnipol BP	Di-ester of carboxymethoxy-benzophenone and polytetramethyleneglycol 250 type II photoinitiator	515136-48-8
Omnipol TP	Polymeric TPO-L	-
Omnipol TX	Di-ester of carboxymethoxy thioxanthone and polytetramethyleneglycol 250 type II photoinitiator	813452-37-8
Omnipol BL 728	Low viscosity blend based on Omnipol TX type II photoinitiator blend	74512-23-5

## DIFUNCTIONAL PHOTOINITIATORS FOR SENSITIVE APPLICATIONS

Omnirad 127	2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one	474510-57-1
Omnirad 819	Bis(2,4,6-trimethylbenzoyl)phenylphosphine oxide	162881-26-7
Omnirad 819 DW	Omnirad 819 DW is a dispersion of 45% bis-acylphosphine oxide in water	
Esacure 1001 M	Difunctional ketosulphone type II photoinitiator	272460-97-6
Esacure ONE	Difunctional oligomeric alpha hydroxy ketone type I photoinitiator	163702-01-0
Esacure KIP 160	Difunctional alpha hydroxy ketone type I photoinitiator	71868-15-0

## AMINE SYNERGISTS FOR SENSITIVE APPLICATIONS

Omnipol ASA	Poly(ethylene glycol) bis(p-dimethylaminobenzoate)	71512-90-8
Omnipol 894	N-methyl-N-phenyl-,1,1''-triester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol	2407644-16-8



Molecular Weight   g/mol	Melting Point   °C	UV-absorption (lambda max)   nm	Through Cure	Surface Cure	Clear Systems	White Systems	Pigmented Systems	LED Cure	Water-based Systems
1039	Liquid at room temperature	230, 325	••	••	•	••	•••	•••	
1032	Liquid at room temperature	240, 325	••	••	•	••	•••	•••	
620	Liquid at room temperature	240, 280, 330	••	•••	••	•••	••		•
730	Liquid at room temperature	270, 325		•••	••	•••	••		•
	Liquid at room temperature	360, 395	••	•	••	••	••	•	
790	Liquid at room temperature	245, 280, 390	•••	••	•	•	•••	•••	
	Liquid at room temperature	290, 311	•••	••	•	•	•••	•••	
340.4	45-50	243, 332	••	•••	•••	•••	••	•	•
418.5	127-133	237, 275, 380	•••	•	••	•••	•••	•••	•
	Liquid at room temperature	237, 275, 380	•••	•	••	•••	•••	•••	•••
514.6	> 100	315	•••	•••	•••		•	••	•
408.5	98-110	260	•••	•••	•••		••		••
342.4	> 96		•••	•••	•••		•••		•
510	Liquid at room temperature	230, 325		•••	••	••	•••	•••	
617.8	Liquid at room temperature			••	••	••		•••	•••

## Chemical Identity

## Cas No.

## ELECTRONICS &amp; SPECIALTIES

Omnirad 369 E	2-benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone	119313-12-1
Omnirad 379 EG	2-dimethylamino-2-(4-methyl-benzyl)-1-(4-morpholin-4-yl-phenyl)-butan-1-one	119344-86-4
Omnirad 1312	5-(4-isopropylphenylthio)-1,2-indandione,2-O-acetyl) oxime	
Omnirad 1314	1,2- Octandione, 1-[4-(phenylthio)phenyl]-,2-o-benzoyloxime)	
Omnirad 1316	Oxime ester	
Omnirad 784	Bis (cyclopentadienyl) bis [2,6-difluoro-3-(1-pyrryl)phenyl titanium	125051-32-3
Omnirad TPO-S	2,4,6-Trimethylbenzoyl-diphenyl phosphine oxide	75980-60-8
Esacure KTO 46	Liquid blend of diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide, alpha hydroxy ketones and Esacure TZT	

## UV-LED BLENDS

Omnirad BL 724	Blend for LED at 365 nm	
Omnirad BL 750	Blend for LED at 395 nm	
Omnipol BL 728	Low viscosity blend based on Omnipol TX type II photoinitiator blend	74512-23-5

## AMINE SYNERGISTS

Omnirad EDB	Ethyl-4-(dimethylamino) benzoate	10287-53-3
Omnirad EHA	2-ethylhexyl-4-dimethylaminobenzoate	21245-02-3

Molecular Weight   g/mol	Melting Point   °C	UV-absorption (lambda max)   nm	Through Cure	Surface Cure	Clear Systems	White Systems	Pigmented Systems	Visible Light Curing	LED Cure	Water-based Systems
366.5	110-114	232, 323	...	..	.	.	...	..		
380.5	88-93	233, 320	...	..	.	.	...	..		
353.4	94-100	355	...	..					..	
	42-45	330								
	100-120	330								
534.4	165-170	398, 470	...		...	...	...	...	...	
348.4	91 - 94	275, 379	...		...	...	..	...		.
	Liquid at room temperature	245, 260, 380	...	...	...	...	..	...	..	..
	Liquid at room temperature	Broad spectrum, suitable at 365 nm	...	..	.	.	...	.	...	
	Liquid at room temperature	Broad spectrum, suitable at 395 nm		..	...	...	..	.	...	
	Liquid at room temperature	290, 311	...	..	.	.	...		...	
193.2	62-68	228, 308		...	..	..	..			
277.4	Liquid at room temperature	312		...	..	..	..			

Chemical Identity		Cas No.	Functionality	Typical Viscosity   mPa.s at 25 °C	Colour   APHA max	Tg   °C
<b>PureOmer 4012</b>	Isobornyl acrylate (IBOA)	5888-33-5	1	10	50	88
<b>Photomer 4034</b>	Caprolactone modified version of HEA	110489-05-9	1	35**	100	
<b>Photomer 4035</b>	Phenoxyethyl acrylate (PEA)	48145-04-6	1	10	60	5
<b>Photomer 4039</b>	Phenol [4 EO] acrylate	56641-05-5	1	30	150	12
<b>Photomer 4135</b>	O-phenylphenoxyethyl acrylate (OPPEOA)	72009-86-0	1	135	100	32
<b>Photomer 4141</b>	Cyclic trimethylolpropane formal acrylate (CTFA)	66492-51-1	1	15	100	40
<b>Photomer 4142</b>	Tetrahydrofurfuryl acrylate (THFA)	2399-48-6	1	8	80	-20
<b>Photomer 4184</b>	2-[[butylamino)carbonyl]oxy]ethyl acrylate	63225-53-6	1	35	200	-3
<b>Photomer 4211</b>	2-(2-ethoxyethoxy) ethyl acrylate (EOEOEA)	7328-17-8	1	6	60	-53
<b>Photomer 4808</b>	Octyl decyl acrylate (ODA)	2499-59-4 + 2156-96-6	1	6	60	-53
<b>Photomer 4810</b>	Isodecyl acrylate (IDA)	1330-61-6	1	8	100	-60
<b>PureOmer 4812</b>	Lauryl acrylate (LA)	2156-97-0	1	7	200	-30

## DI-FUNCTIONAL MONOMERS

<b>Photomer 4017*</b>	Hexanediol diacrylate (HDDA)	13048-33-4	2	8	60	41
<b>Photomer 4028</b>	Bisphenol-A [4 EO] diacrylate	64401-02-1	2	1000	150	63
<b>Photomer 4050</b>	Polyethyleneglycol 200 diacrylate (PEG200DA)	26570-48-9	2	20	70	8
<b>Photomer 4054</b>	Polyethyleneglycol 400 diacrylate (PEG400DA)	26570-48-9	2	50	100	3
<b>Photomer 4056</b>	Polyethyleneglycol 600 diacrylate (PEG600DA)	26570-48-9	2	100	100	-42
<b>Photomer 4061*</b>	Tripropyleneglycol diacrylate (TPGDA)	42978-66-5	2	14	100	64
<b>Photomer 4071</b>	3 methyl-1.5-pentanediol diacrylate (MPDDA)	64194-22-5	2	8.5	120	50

\* Products available as toluene free version

\*\* At 40°C



32	Solvency, adhesion, good flexibility, thermoforming. Bio-based Content (ASTM D6866-21) : 78 %	••	•	••	••	•••	•
	Enhanced flexibility, improved chemical resistance and superior hydrolytic stability	••	••	•••		•••	
38	Adhesion, coating hardness, high MW resin compatibilizer	••		•••		•••	•
41	Flexible, low odour, adhesion	•		•••	•	•••	•
40	High refractive index	•				••	
36	Adhesion, coating hardness, chemical resistance	••	••	••	•••	•••	
35	Adhesion, chemical resistance, good weatherability, high solvency		••		••	•••	
	Flexibility, adhesion, high elongation	•		•••		•••	
31	Adhesion, solvency, high flexibility	•		•••	•••	••	
27	Hydrophobic, good wetting properties, good flexibility, good adhesion	•		••	••	••	•
29	Flexibility, hydrophobic, pigment wetting, substrate wetting	•		•••	••		••
30	Flexibility, hydrophobic, good adhesion, low shrinkage, Bio-based Content (ASTM D6866-21) : 81 %	•		•••	••	••	
35	Adhesion, chemical resistance, high solvency and cutting power	•••	•••	•	•••	•••	••
43	Gloss, low shrinkage, low skin irritation, litho additive	••	••		••	••	•••
39	Flexibility, flow and leveling, water dispersible	••	•	••	••	••	
40	Flexibility, water dispersible, low volatility	•	•	••	••	••	
41	Flexibility, water dispersible, low volatility	•	•	••	••	••	
32	Versatile, good flexibility and high reactivity	••	••	•	••	••	•
33	Low odour, adhesion, high solvency and cutting power	•••	•••	•	•••	•••	••



	Chemical Identity	Cas No.	Functionality	Typical Viscosity   mPa.s at 25 °C	Colour   APHA max	Tg   °C
Photomer 4127	Neopentylglycol [PO] diacrylate (NPGPODA)	84170-74-1	2	15	80	35
Photomer 4226*	Dipropylene glycol diacrylate (DPGDA)	57472-68-1	2	10	60	96
Photomer 4361	Hexanediol [2 EO] diacrylate (HD2EODA)	84170-27-4 + 13048-33-4	2	15	250	
Photomer 4362	Hexanediol [2 PO] diacrylate (HD2PODA)	84170-73-0	2	15	150	

## TRI- AND HIGHER FUNCTIONAL MONOMERS

Photomer 4006	Trimethylolpropane triacrylate (TMPTA)	15625-89-5	3	100	50	62
Photomer 4072	Trimethylolpropane [3 PO] triacrylate (TMP3POTA)	53879-54-2	3	80	250	-15
PureOmer 4094*	Glyceryl [4 PO] triacrylate (GPTA)	52408-84-1	3	85	100	33
Photomer 4149*	Trimethylolpropane [3 EO] triacrylate (TMP3EOTA)	28961-43-5	3	63	50	37
Photomer 4157	Trimethylolpropane [9 EO] triacrylate (TMP9EOTA)	28961-43-5	3	105	100	-12
Photomer 4158	Trimethylolpropane [15 EO] triacrylate (TMP15EOTA)	28961-43-5	3	170	150	-32
Photomer 4172	Pentaerythritol [5 EO] tetraacrylate (PPTTA)	51728-26-8	4	160	100	36
Photomer 4306	Ditrimethylolpropane tetra-acrylate (DiTMPTA)	94108-97-1 / 1393932-71-2	4	550	100	96
Photomer 4307	Ditrimethylolpropane tetra-acrylate (DiTMPTA)	94108-97-1 / 1393932-71-2	4	650	300	
Photomer 4335	Pentaerythritol tri and tetraacrylate (PETIA)	1245638-61-2	3.5	650	100	100
Photomer 4356	Tris (2-hydroxy ethyl) Isocyanurate triacrylate (THEICTA)	40220-08-4	3	wax	100	240
Photomer 4399	Dipentaerythritol Penta/Hexaacrylate (DPHA)	1384855-91-7	6	13000	60	
Photomer 4600	Dipentaerythritol Penta/Hexaacrylate (DPHA)	1384855-91-7	5	6000	50	
Photomer 4666	Dipentaerythritol Penta/Hexaacrylate (DPHA)	1384855-91-7	5	5500	100	94

\* Products available as toluene free version

Surface Tension 25°C   m n/m	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
32	Pigment wetting, flow and leveling, low shrinkage, low tension surface	••		••	••	•	••
33	Pigment wetting, high reactivity, high solvency and cutting power	••	••	•	••	••	•
38	Pigment wetting, flow and leveling	••	••	•	••	•••	••
34	Pigment wetting, flow and leveling	••	••	•	••	•••	••
50	High reactivity, coating hardness, chemical resistance	•••	•••	•	•••	••	•
	High reactivity, flexibility, chemical resistance, low shrinkage	•••	••	••	•••	••	•••
33	Pigment wetting, flexibility, impact resistance Bio-Based Content (ASTM D6866-21) : 14 %	•••	••	••	••	•	•••
38	High reactivity, coating hardness, tensile strength	•••	••	••	•••	••	•••
39	Flexibility, impact resistance, abrasion resistance, water dispersible	••	••	•••	•••	••	•••
39	Flexibility, impact resistance, abrasion resistance, water dispersible	••	••	•••	•••	••	•••
38	High reactivity, dispersive properties, flexibility, high purity and low solvent content	•••	•••	•	••	••	••
35	High reactivity	•••		•	••	•	••
35	High reactivity	•••		•	••	•	••
	High reactivity, low viscosity	•••		•	••	•••	•
	High Tg, good heat resistance	•••	•••	•	•	••	
42	High reactivity, hardness, abrasion and scratch resistant	•••	•••	•	••	••	•••
41	High reactivity, hardness, abrasion and scratch resistant	•••	•••	•	••	••	•••
42	High reactivity, hardness and scratch resistant	•••	•••	•	••	••	•••

Chemical Identity		Functionality	Typical Viscosity   mPa.s at T °C	T   °C	Colour   Gardner max	Tensile Strength   psi	Elongation   %
<b>PureOmer 3005</b>	Acrylated epoxy soy oil (ESBOA)	2	20000	25	7	1150	16
<b>Photomer 3016</b>	Bisphenol A epoxy diacrylate	2	5500	60	1		
<b>Photomer 3016-20G</b>	Bisphenol A epoxy diacrylate diluted with 20% GPTA	2	75000	25	1		
<b>Photomer 3016-20D</b>	Bisphenol A epoxy diacrylate diluted with 20% DPGDA	2	30000	25	1		
<b>Photomer 3016-20H</b>	Bisphenol A epoxy diacrylate diluted with 20% HDDA	2	8000	25	1		
<b>Photomer 3016-20R</b>	Bisphenol A epoxy diacrylate diluted with 20% TPGDA	2	23000	25	1		2
<b>Photomer 3016-20T</b>	Bisphenol A epoxy diacrylate diluted with 20% TMPTA	2	50000	25	1		
<b>Photomer 3016-25R</b>	Bisphenol A epoxy diacrylate diluted with 25% TPGDA	2	15000	25	1	7800	5
<b>Photomer 3016-25T</b>	Bisphenol A epoxy diacrylate diluted with 25% TMPTA	2	45000	25	1		
<b>Photomer 3016-40G</b>	Bisphenol A epoxy diacrylate diluted with 40% GPTA	2	1700	40	1		
<b>Photomer 3016-40R</b>	Bisphenol A epoxy diacrylate diluted with 40% TPGDA	2	2000	25	1		
<b>Photomer 3016-40T</b>	Bisphenol A epoxy diacrylate diluted with 40% TMPTA	2	7500	25	1		
<b>Photomer 3016-60G</b>	Bisphenol A epoxy diacrylate diluted with 60% GPTA	2	900	25	1		
<b>Photomer 3052</b>	Difunctional Epoxy Acrylate Blend	2	52500	25			
<b>Photomer 3318</b>	Modified Bisphenol A epoxy diacrylate	2	7000	60	2		
<b>Photomer 3701*</b>	Cresol novolac epoxy acrylate diluted in 40% TMPTA	3	10000	25	5		

\*Product free of Bisphenol A



T <sub>g</sub>   °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
8	Flexibility, excellent pigment wetting. Bio-based Content (ASTM D6866-21) : 84 %	•	•	••	••	•	••
60	Gloss, chemical resistance, coating hardness	••	•••	•	•	•	••
	Gloss, chemical resistance, improved flexibility	••	•••	•	•	•	••
	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
	Gloss, chemical resistance	••	••	•	•	••	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
38	Cure speed, chemical resistance, coating hardness	•••	•••	•	•	•	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	••	••
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	••	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
53	Chemical resistance, cure speed	•••	•••	•	•	••	••
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	•	••
	High gloss finish, excellent scuff, and superior solvent resistance	•••	•••	•	•	••	••
52	Fast cure, high reactivity, pigment wetting, high gloss	•••	•••	•	•	•	•••
67	Chemical resistance, heat resistance, surface hardness, high reactivity	•••	•••	•	•	•	•



Chemical Identity		Functionality	Typical Viscosity   mPa.s at T °C	T   °C	Colour   Gardner max	Tensile Strength   psi	Elongation   %
<b>Photomer 5010</b>	Matting resin	2	Thixotropic Gel	25			
<b>Photomer 5419</b>	Tetrafunctional Polyester Acrylate	4	400	25	2		
<b>Photomer 5425</b>	Polyester Acrylate	2	30000	25			
<b>Photomer 5429</b>	Polyester tetraacrylate	4	400	25	2	1870	10
<b>PureOmer 5433</b>	Polyester tetraacrylate	4	4500	60			
<b>Photomer 5434</b>	Polyester tetraacrylate	4	17500	25	4		
<b>PureOmer 5437</b>	Polyester tetraacrylate	4	9500	25	5		
<b>Photomer 5442</b>	Polyester acrylate hexaacrylate	6	9500	25	15		
<b>PureOmer 5443</b>	Polyester hexaacrylate	6	32500	25			
<b>Photomer 5444</b>	Modified polyester acrylate	4	30000	25	4		
<b>PureOmer 5450</b>	Fatty acid modified polyester hexaacrylate	6	9500	25	15		
<b>Photomer 9144</b>	Unsaturated polyester oligomer diluted in DPGDA	2	12500	25	4		
<b>Photomer 9145</b>	Unsaturated polyester oligomer diluted in DPGDA	2	11000	25	4		

## POLYETHER ACRYLATES

<b>PureOmer 5662</b>	Amine modified polyether acrylate	4	3000	25	1		
<b>PureOmer 5850</b>	Amine modified polyether acrylate	2.5	105	25	2		
<b>Photomer 5930</b>	Amine modified polyether acrylate	4	500	25	2		

T <sub>g</sub>   °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
	Self-matting, low gloss	•••	••	••	•	•••	••
31	Good adhesion to metal substrate, pigment wetting, scruff resistance	•••	••	••		•••	••
	Good flexibility and high abrasion resistance	•••	•••	•••			••
45	Tensile strength, cure speed, adhesion, low viscosity	••	••	••		•••	••
	Pigment wetting, litho properties, abrasion resistance, toughness Bio-based Content (ASTM D6866-21) : 47 %	••	•	•••			••
	Good flexibility, good reactivity	••	••	•••			••
	Excellent pigment wetting, good adhesion, scratch resistance, high gloss Bio-based Content (ASTM D6866-21) : 14 %	••	••	••		•••	••
	Fast cure, litho properties, very good pigment wetting, good flow ability	•••	••	•••	••		••
	High reactivity, PETA and PETIA free, good litho performance Bio-based Content (ASTM D6866-21) : 46 %	•••	•••	••	•	•	•••
	Good flexibility, pigment wetting, good reactivity	•••	••	•••			••
17	High reactivity, litho properties, pigment wetting Bio-based Content (ASTM D6866-21) : 40 %	•••	••	••	•		••
	Adhesion, pigment wetting of extender	•	•	•••		•••	••
	Adhesion, pigment wetting of extender	•	•	•••		•••	••
	Adhesion, flexibility, coating hardness Bio-based Content (ASTM D6866-21) : 14 %	•••	••	•••	••	••	••
20	Low viscosity, high reactivity Bio-based Content (ASTM D6866-21) : 18 %	•••	••	•••	••	••	••
	Pigment wetting, high reactivity, chemical resistance, oxygen inhibitor	•••	••	••	••	••	••

Chemical Identity		Functionality	Typical Viscosity   mPa.s at T °C	T   °C	Colour   Gardner max	Tensile Strength   psi	Elongation   %
Photomer 4184	2-[[butylamino)carbonyl]oxy] ethyl acrylate	1	35	25			
Photomer 6008	Aliphatic urethane triacrylate	3	16000	60	1	6800	8
Photomer 6010	Aliphatic urethane diacrylate	2	5800	60	1	2100	45
Photomer 6019	Aliphatic urethane triacrylate	3	3250	60	1	8200	8
Photomer 6024	Aliphatic urethane diacrylate	2	45000	25			
Photomer 6063	Aliphatic urethane diacrylate	2	2800	60	1		
Photomer 6064	Aliphatic urethane acrylate	2.5	1250	60	1		
Photomer 6184	Aliphatic urethane triacrylate	3	58000	25	1	5400	7
Photomer 6210	Aliphatic urethane diacrylate	2	12000	25	1	1400	40
Photomer 6215	Aliphatic urethane diacrylate	2	20000	60	2	2438	82
Photomer 6230	Aliphatic urethane diacrylate	2	3500	60	1	1100	70
Photomer 6620	Aliphatic urethane diacrylate	2	40000	25	2		
Photomer 6621 ◊	Aliphatic urethane hexaacrylate	6	2000	65	2		
Photomer 6628	Aliphatic urethane hexaacrylate	6	80000	25	1	6700	2
Photomer 6630	Aliphatic urethane diacrylate	2	65000	25	2		29
Photomer 6631 ◊	Aliphatic urethane hexaacrylate	6	30000	25	2		
Photomer 6638	Aliphatic urethane diacrylate	2	120000	25	2		
Photomer 6639 ◊	Aliphatic urethane triacrylate	3	7500	25			
Photomer 6642	Aliphatic urethane triacrylate	3	50000	25	2		
Photomer 6643	Aliphatic urethane diacrylate	2	50000	60	2	384	104
Photomer 6644	Aliphatic urethane diacrylate	2	20000	25	2	284	300

◊Tin Free



T <sub>g</sub>   °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
-3	Flexibility, adhesion, high elongation	•		••		•••	
47	Coating hardness, tensile strength, chemical resistance, non-yellowing	••	•••	••	•••	•	
-7	Good weatherability, non-yellowing, thermoforming	••	••	•••	••	•	••
51	Coating hardness, tensile strength, adhesion, non-yellowing	••	•••	••	•••	••	
-51	Good flexibility, yellowing resistance and good UV/EB cure reactivity	••	•	•••	•••	•••	
	Excellent light stability, chemical resistance, abrasion resistance and flexibility	•••	••	•••	••	••	
	Excellent light stability, chemical resistance, abrasion resistance	•••	•••	•••	••	••	
53	Ease of handling, coating hardness, tensile strength, temperature resistant, non-yellowing	••	•••	••	•••	•	
32	Ease of handling, scratch resistance, flexibility, impact resistance, adhesion, non-yellowing	••	••	•••	•••	•••	
	Mechanical resistance, flexibility, non-yellowing	••	••	•••	••	••	
2	Abrasion resistance, impact resistance, low odour, adhesion, non-yellowing	••	••	•••	•••	•••	
33	Good toughness and flexibility	••	••	•••	••	•	
	Tin free, Fast cure, good chemical and mechanical resistance	•••	•••	•	•••	•	
80	Cure speed, impact resistance, scratch and chemical resistance, non-yellowing	•••	••	••	•••	•••	
-27	Good toughness, flexibility, non-yellowing	••	••	•••	••	•	
	Coating hardness, good scratch and abrasion resistance, high reactivity	•••	•••	•		•	
19	Good weatherability, good flexibility	••	••	••	•••	•••	
	Tin free, good chemical and mechanical resistance, good flexibility	••	••	••			
	Fast cure, good flexibility, hardness	••	••	••	••		
-40	High elongation, excellent flexibility, good abrasion resistance, adhesion	•	•••	•••	••	••	
-37	High elongation, excellent flexibility, adhesion	•	••	•••	•••	•••	

Chemical Identity		Functionality	Typical Viscosity   mPa.s at T °C	T   °C	Colour   Gardner max	Tensile Strength   psi	Elongation   %
Photomer 6645	Aliphatic urethane diacrylate	2	35000	25	1	994	760
Photomer 6646	Aliphatic urethane tetraacrylate	4	32500	25	50 Apha		
Photomer 6648 ◊	Aliphatic urethane tetraacrylate	4	8000	25	150 Apha		
Photomer 6690	Aliphatic Urethane hexaacrylate	6	20000	65	2		
Photomer 6692 ◊	Aliphatic urethane hexaacrylate	6	5500	25	2		
Photomer 6718 ◊	Aliphatic Urethane triacrylate	3	16000	60	1		
Photomer 6721	Aliphatic urethane diacrylate	2	7500	25	1		
Photomer 6891	Aliphatic urethane diacrylate	2	8000	25	1	2000	60
Photomer 6892	Aliphatic urethane triacrylate	3	29500	25	1	1300	45

## AROMATIC URETHANE ACRYLATES

Photomer 6577	Aromatic urethane 10 acrylate	10	190000	25	2		
Photomer 6578 ◊	Aromatic urethane tetra acrylate	4	6000	23	300 Apha		
Photomer 6579	Aromatic urethane diacrylate	2	7500	25	2		
Photomer 6581	Aromatic urethane diacrylate	2	120000	25	2		
Photomer 6582	Aromatic urethane diacrylate	2	180000	25	2		30
Photomer 6720	Aromatic urethane hexaacrylate	6	28500	25	2		

## WATER DILUTABLE URETHANE ACRYLATES

Photomer AQUA 6901 ◊	Water dilutable urethane diacrylate	2	57500	40	2		
Photomer AQUA 6902	Water dilutable urethane diacrylate	2	35000	25	2		
Photomer AQUA 6903	Water dilutable urethane hexaacrylate	6	30000	25	2		

◊Tin Free

T <sub>g</sub>   °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
-39	Very high elongation, excellent flexibility, good abrasion resistance, adhesion	•	••	•••	•••	•••	
	Good abrasion resistance, good weatherability, good reactivity	•••	•••	•	•••	••	
	Tin free, good mechanical and chemical resistance, good abrasion resistance in combination with high flexibility	•••	•••	•••		••	
	Fast cure, good chemical and mechanical resistance	•••	•••	•	•••	•	
	Petia free, tin free, Excellent abrasion resistance, good hardness, good chemical and water resistant	•••	••	••	•••	•••	
	Tin free, fast cure speed, high temperature stability, superior solvent resistance	••	•••	••	•••	•	
	Good mechanical properties, good stability for inkjet printing applications	••	••	•••	•••	•••	
28	Flexibility, impact resistance, adhesion, non-yellowing	••	••	•••	•••	•••	
14	Adhesion, chemical resistance, flexibility, scratch resistance, non-yellowing	••	••	•••	••	•••	
45	Outstanding solvent and chemical resistance, excellent surface hardness and abrasion resistance and has a high reactivity	•••	•••	•			
40	Tin free, low viscosity, good abrasion and scratch resistance	••	••	••			
10	Flexibility, abrasion resistance	••	•	•••	•	••	
	Excellent litho performance and pigment wetting	••	••	••	•		••
-24	Low yellowing, good flexibility, good reactivity	••		•••	••		
49	Fast cure, impact strength, hardness, abrasion resistance	•••	••	•	•	•	
	Good flexibility, good compatibility with water	••	••	••	•••		
	Good weatherability, good toughness	••	••	••	•••		
	Fast curing, excellent toughness	•••	•••	••	•••		

Chemical Identity		Functionality	Typical Viscosity   mPa.s at 25 °C	Colour   Gardner max	Acid Value   mg KOH/g max	Tg   °C
<b>Photomer 2203</b>	Acid functional methacrylate	2	1250	3	320	
<b>Photomer 4173</b>	Acid functional acrylate	1	4000	1	210	
<b>Photomer 4703</b>	Acid functional acrylate	1	190	2	290	
<b>Photomer 5028</b>	Chlorinated polyester 40% of GPTA	3	95000	3	25	53
<b>Photomer 5042</b>	Chlorinated polyester 40% of TMPTA	3	125000	3	20	
<b>PureOmer 5437</b>	Polyester tetraacrylate	4	9500	5	15	
<b>Photomer 9502</b>	Acrylic resin diluted in TPGDA and HDDA	2	17500		1	15

Chemical Identity		Cas No.	Functionality	Typical Viscosity   mPa.s at 25 °C	Colour   APHA max
-------------------	--	---------	---------------	------------------------------------	-------------------

## METHACRYLATES

<b>Photomer 2006</b>	Trimethylolpropane trimethacrylate (TMPTMA)	3290-92-4	3	43	70
<b>PureOmer 2012</b>	Isobornyl methacrylate (IBOMA)	7534-94-3	1	6	50
<b>Photomer 2050</b>	Polyethyleneglycol 200 di- methacrylate (PEG200DMA)	25852-47-5	2	14	60
<b>Photomer 2203</b>	Acid functional methacrylate	25212-88-8	2	1250	3 G
<b>Photomer 2317</b>	Hydroxypropyl methacrylate (HPMA)	213-090-3	1		30
<b>Photomer 2318</b>	Hydroxyethyl Methacrylate (HEMA)	868-77-9	1		30
<b>Photomer 2812</b>	Lauryl methacrylate (LMA)	142-90-5	1	6	100

Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
Adhesion to especially metal and glass	•	•	•••		•••	
Adhesion, coating hardness, chemical resistance	•	•••			•••	
Adhesion, low viscosity, chemical resistance	•				•••	
Adhesion promoter	••		••	•	•••	••
Adhesion promoter	••		••	•	•••	
Excellent pigment wetting, good adhesion, scratch resistant, high gloss Bio-based Content (ASTM D6866-21) : 14 %	••	••	••		•••	•••
Adhesion promoter	•	•	•••		•••	

Acid Value   mg koh/g max	Tg   °C	Surface Tension 25°C   m n/m	Product Attributes	Reactivity	Hardness	Flexibility	Adhesion	
0.1	27	32	Chemical and impact resistance, hardness		•••	••	•	•••
0.5	150	31	Adhesion, flexibility, low shrinkage, abrasion resistance, high Tg (150) Bio-based Content (ASTM D6866-21) : 72 %	•	•	••	•••	
0.5		35	Heat resistance, chemical resistance, flexibility	•	•	••	•	
320			Adhesion to especially metal and glass	•	•	•••	•••	
1.5			Adhesion to especially metal and plastic, hydrophilic	•	•	••	•••	
0.3	55		Soluble in water, raw material for polymer synthesis	•			••	
0.1	-65	28.9	Low shrinkage, good flexibility, hydrophobic, good weather resistance	•	••	••	••	



Chemical Identity

AMINE ACRYLATES

Photomer 4068	Acrylated amine synergist	2.5
Photomer 4250	Acrylated amine synergist	2.5
Photomer 4771	Acrylated amine synergist	2
Photomer 4775	Acrylated amine synergist	2
Photomer 4780	Acrylated amine synergist	2
Photomer 4967	Acrylated amine synergist	1
Photomer 5006	Acrylated amine synergist	1

Chemical Identity

Cas No.

SPECIALTIES

Omnimer ACMO	Vinyl monomer; acryloylmorpholine	5117-12-4
Omnimer NVP	Vinyl monomer; 1-vinyl-2-pyrrolidone (NVP)	88-12-0
Omnimer VCL	Vinyl monomer; 1-vinylhexahydro-2H-azepin-2-one (NVC)	2235-00-9

Typical  
Viscosity |  
mPa.s at 25 °C

Colour |  
Gardner max

Product Attributes

Reactivity

Flexibility

Yellowing  
Resistance

Adhesion

Pigment  
Wetting

Typical Viscosity   mPa.s at 25 °C	Colour   Gardner max	Product Attributes	Reactivity	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
125		Cure speed, high reactivity, chemical resistance, oxygen inhibitor	•••	•	•	•	
350	6	Cure speed, high reactivity	•••	•		••	•
700	3	Cure speed, non-yellowing, low viscosity	•••	•		•••	•
3200	3	Cure speed, non-yellowing, oxygen inhibitor	•••	•		•••	•
1150	2	Cure speed, non-yellowing, low viscosity	•••	•		•••	•
20	2	Cure speed, high reactivity, chemical resistance, oxygen inhibitor	•••	•	•	•	
73	2	Cure speed, high reactivity, chemical resistance, oxygen inhibitor	•••	•	•	•	

Melting Point | °C

Appearance

Product Attributes

Melting Point   °C	Appearance	Product Attributes
Liquid at room temperature	Colourless or pale yellow clear liquid	Provides as a co-monomer flexibility, low shrinkage and heat resistance
Liquid at room temperature	Clear liquid	Provides as a co-monomer flexibility, low shrinkage, adhesion and cure speed
32-36	Light yellow crystalline solid	Provides as a co-monomer flexibility, low shrinkage, adhesion, pigment wetting and hydrophobicity



ENERGY CURING RESINS

Chemical Identity

**CATIONIC PHOTOINITIATORS**

Omnicat 250	75% solution of Iodonium, (4-methylphenyl)[4-(2-methylpropyl)phenyl]-, hexafluorophosphate(1-) in propylene carbonate
Omnicat 270	High-molecular-weight sulfonium hexafluoro phosphate
Omnicat 320	Mixed triarylsulphonium hexaantimonate salts in 50% propylene carbonate
Omnicat 432	Mixed triarylsulfonium hexafluorophosphate salts (45%) in propylene carbonate (55%)
Omnicat 440	4,4'-dimethyl-diphenyl iodonium hexafluorophosphate

**SENSITISERS AND PHOTO ACID GENERATORS**

Omnirad 1173	2-hydroxy-2-methyl-1-phenylpropanone
Omnirad ITX	2-isopropyl thioxanthone

Chemical Identity

Cas No.

Typical Viscosity | mPa.s at T °C

T (°C)

Colour | APHA max

**CATIONIC OLIGOMERS**

	Chemical Identity	Cas No.	Typical Viscosity   mPa.s at T °C	T (°C)	Colour   APHA max
Omnilane OC1005	(3-4-epoxycyclohexane) methyl3'-4'-epoxycyclohexyl-carboxylate	2386-87-0	400	25	100
Omnilane OC3005	Bis(7-oxabicyclo[4.1.0]hept-3-ylmethyl) adipate	3130-19-6	575	25	250



Cas No.	Melting Point   °C	UV-absorption (lambda max)   nm	Through Cure	Surface Cure	Clear Systems	White Systems	Pigmented Systems	LED Cure
344562-80-7 + 108-32-7	Liquid at room temperature	240	...	..	..	...	...	
953084-13-4	192	223, 325				...	...	
159120-95-3 + 108-32-7	Liquid at room temperature	245, 312	..	..	..	...		
68156-13-8 + 74227-35-3 + 108-32-7	Liquid at room temperature	210, 300	..	..	...	...	...	
60565-88-0	175-180	267	..	..	.	..	...	
7473-98-5	Liquid at room temperature	244, 330	..	...	...	..	..	.
5495-84-1	70-76	255, 384	...	..			...	..
<b>Product Attributes</b>				<b>Reactivity</b>	<b>Hardness</b>	<b>Flexibility</b>	<b>Yellowing</b>	<b>Adhesion</b>
Fast cure, heat resistant, adhesion				...	...	.	...	...
Fast cure, higher flexibility, adhesion				...	...	..	...	...



## Chemical Identity

**INHIBITOR**

Omnistab IN 515	Liquid blend of tris(N-hydroxy-N-nitrosophenyl-aminato-O,O'alumium and 2-phenoxy ethyl acrylate
Omnistab IN 516	Liquid blend of tris(N-hydroxy-N-nitrosophenyl-aminato-O,O'alumium and 2-phenoxy ethyl acrylate
Omnistab IN 518	Liquid blend of tris(N-hydroxy-N-nitrosophenyl-aminato-O,O'alumium and propoxylated glycerol triacrylate
Omnistab IN 538	2,5-cyclohexadien-1-one, 2,6 bis(1,1-dimethyl)-4- (phenylmethylene)-(9CI)
Omnistab BHT	2,6-di-tert-butyl-p-cresol
Omnistab MEHQ	4-methoxyphenol
Omnistab PTZ	Phenothiazine

## Chemical Identity

## Cas No.

## Melting Point | °C

**ADDITIVES****WETTING, FLOW, SLIP ADDITIVE**

Omnivad 280	Acrylated silicone surfactant		Liquid at room temperature
-------------	-------------------------------	--	----------------------------

**RHEOLOGY MODIFIER**

Omnivad SB Flakes	Sucrose benzoate	12738-64-6	93-100
Omnivad Mirroflex SB 50%	50% sucrose benzoate solution		Liquid at room temperature

**OPTICAL BRIGHTENER**

Omnistab OB	2,5 thiophenediylbis (5-tert-butyl-1,3 benzoxazole)	7128-64-5	200-205
Omnistab OB-1	4,4'-bis(benzoxazol-2yl) stilbene	1533-45-5	> 300
Omnistab UV Bright #2	Confidential	Proprietary	Liquid at room temperature

Cas No.	Melting Point   °C	Appearance	Product Attributes
15305-07-4 + 48145-04-6	Liquid at room temperature	Medium to dark brown liquid	Polymerisation inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
15305-07-4 + 48145-04-6	Liquid at room temperature	Medium to dark brown liquid	Polymerisation inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
15305-07-4 + 52408-84-1	Liquid at room temperature	Medium to dark brown liquid	Polymerisation inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
7078-98-0	54-72	Yellow to orange powder	Polymerisation inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
128-37-0	69-73	White flake powder to irregular crystal form	Polymerisation inhibitor for UV/EB formulations
150-76-5	54-56.5	White crystals	Polymerisation inhibitor for UV/EB formulations
92-84-2	183-186	Light yellow flake or powder	Polymerisation inhibitor for UV/EB formulations

Appearance	Product Attributes
Clear liquid	Reactive, crosslinkable surface active levelling agent. Improves slip and flow
Light yellow to pale white crystalline	Rheology modifier / hold-out additive, improves colour strength
Slight amber to clear liquid	Rheology modifier / hold out additive. Flexibility, good hardness, no loss of gloss
Pale to yellow crystalline powder	Optical brightener / fluorescent whitening agent. Stable at high temperatures and suitable for use in inks and coatings
Light yellow powder	Optical brightener for polymer processing
Light green viscous liquid	Liquid optical brightener / fluorescent whitening agent suitable for use in inks and coatings



	Incorporation	Dosage   %	Active content   %	Product Attributes
<b>SILICONE-FREE FOAM CONTROL ADDITIVES</b>				
ADD-2020	Before or after processing	0.1-0.7	20	Acid-cure and NC-curtain coating systems, unsaturated polyester and gelcoats
ADD-2021	End of processing	0.5-2.0	-	Polyurethane, acid-cure and stoving enamels
ADD-2720	Before or after processing	0.1-1.0	-	Unsaturated polyester, epoxy and polyurethane systems

<b>SILICONE-CONTAINING FOAM CONTROL ADDITIVES</b>				
ADD-2286	Before processing	0.05-0.6	> 98	For solvent borne and radiation curing coatings, inks and varnishes. Ideal for high speed rotation screen printing inks
ADD-2721	Any stage	0.5-1.0	-	Defoaming substances in acrylate monomers for radiation curing systems
ADD-2723	Prior to processing	0.5-1.5	100	Solvent-free epoxy and polyurethane systems, low odour

<b>SILICONE-FREE SLIP &amp; LEVELLING ADDITIVES</b>				
ADD-3260	End of process	0.05-1.0	100	Wetting, levelling and flow control agent with excellent anti-cratering properties

<b>SILICONE-CONTAINING SLIP &amp; LEVELLING ADDITIVES</b>				
ADD-3230	Any stage	0.05-0.5	100	100% version of ADD-3030
ADD-3235	End of process	0.25-0.5	100	100% version of ADD-3035
ADD-3236	After thinning	0.02-0.3	100	Solvent borne wood finishes, industrial coatings and solvents-free coatings
ADD-3290	Any stage	0.05-0.5	100	Premium additive that increases slip, surface smoothness and "soft-touch" effect

	Inorganics   % of OA	Organics   % of BET	Blacks   % of DBP	Active content   %	Product Attributes
<b>HIGH MOLECULAR WEIGHT DISPERSANTS BASED ON POLYURETHANE CHEMISTRY</b>					
ADD-4047	10	30-50	15-25	35	High quality industrial finishes including automotive OEM and refinish
ADD-4063	10	25-50	20-30	45	Solvent-based coatings, including automotive topcoats and high-quality industrial coatings. Ideal for pigment concentrates for high-end applications requiring durability

	Inorganics   % of OA	Organics   % of BET	Blacks   % of DBP	Active content   %	Product Attributes
<b>HIGH MOLECULAR WEIGHT DISPERSANTS BASED ON POLYACRYLATES</b>					
ADD-4401	10	30-50	15-25	50	High quality industrial coatings including transportation coatings
ADD-4430	10	30-50	20-30	50	High quality industrial coatings, especially RMPC's including NC lacquers

**Dosage based on Pigment / Bentonite | %**

	Inorganics	Organics	Bentonite	Active content   %	Product Attributes
<b>LOW MOLECULAR WEIGHT DISPERSANTS</b>					
ADD-5207	0.5-5.0	2.0-5.0	-	100	Solvent borne architectural and decorative paints
ADD-5217	0.5-5.0	-	-	100	Solvent borne, solventless coatings and printing inks. Excellent for Titanium Dioxide and extenders
ADD-5244	0.1-1.0	1.0-2.5	15-25	100	Solvent-free version of ADD-5044

**MODERN LOW MOLECULAR WEIGHT DISPERSANTS**

ADD-6212	5-10	-	-	100	Acidic polyether, dispersant for solvent-based and solvent-free coatings and composite
ADD-6231	1-3	-	-	100	Aliphatic polyether with acidic groups especially for PVC plastisol purposes

OA: Oil absorption value  
 BET: Surface area value  
 DBP: Dibutyl Phtalate absorption value



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
---------------	------------------------------------	------------	----	---	----	-----	----

### METHACRYLATES

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

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 3005	Acrylated epoxy soy oil (ESBOA)	84	2	20000	25	7	1150	16
---------------	---------------------------------	----	---	-------	----	---	------	----

### POLYESTER ACRYLATES

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 5662	Amine modified polyether acrylate	14	4	3000	25	1		
PureOmer 5850	Amine modified polyether acrylate	18	2.5	105	25	2		

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	•	•	••		•••	

Tg   °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	•••	••	•••	••	••	••

---

# Technical support

## Tailored solutions for each customer

IGM Resins is a fully integrated global supplier of Energy Curing intermediates. We have the capability to develop energy curing materials, customize them to meet your requirements or increase your productivity, and help you maximize their performance in your application.

IGM Resins registers its products with regulatory inventories such as TSCA and REACH to provide our customers around the world with a broad range of energy curable materials that meet their formulated system needs.



We comply with regulations regarding specific uses for our products – like coatings for food packaging or toys – and advise customers on the appropriate products for regulated applications. We also inform our customers

**Our technical experience and flexibility to find the right solution for each of our customers – large or small – is a major factor in our industry leadership.**





about safe transport and handling of our products and how to safely use them in their manufacturing processes. IGM provides safety data sheets that comply with national and regional requirements. In addition, we comply with all requirements noted in our customer agreements.

Due to regional legislation, some of the products contained in the brochure are not available. Please visit our website or ask availability

of the requested product to your commercial contact.

For IGM's global network of officially appointed agents, please visit our website [www.igmpresins.com](http://www.igmpresins.com)



# Contact information

## IGM Resins in the world



### EUROPE

#### IGM Resins B.V.

Gompenstraat 49  
5145 RM Waalwijk, The Netherlands  
T: +31 416 316657  
F: +31 416 564632

#### IGM Holding B.V. Iberica

Paseo de Gracia, 118 - principal  
08008 Barcelona, Spain  
T: +34 93 476 5631  
F: +34 93 396 1837

#### IGM Resins Italia S.r.l.

Insubrias Biopark  
Via Roberto Lepetit, 34  
21040 Gerenzano (VA), Italy  
T: +39 02 9647 4929

#### ADD Additives BV

Daltonstraat 42  
3846 BX Harderwijk  
The Netherlands  
T: +31 (0) 880 701 700  
info@add-additives.com



- Sales and Distribution
- Manufacturing
- R&D / Tech Support

## APPLICATION LABORATORIES

### IGM Resins Italia S.r.l.

Insubrias Biopark  
Via Roberto Lepetit, 34  
21040 Gerenzano (VA),  
Italy

### Insight High Technology (Beijing) Co., Ltd

Room 304, Building 21,  
Cuihu CIT West side,  
No.1 Gaolizhang Rd,  
Haidian District, Beijing,  
100095, PRC

### IGM (Anqing) High Technology Development Co., Ltd.

No. 16, Crown Road,  
High-Tech Zone,  
Anqing City, Anhui  
Province, 246000, PRC

### IGM Resins USA Inc.

3300 Westinghouse Blvd  
Charlotte, NC 28273,  
United States of America

### ADD Additives BV

Daltonstraat 42  
3846 BX Harderwijk  
The Netherlands

*For IGM's global network of officially appointed agents, please visit our website [www.igmresins.com](http://www.igmresins.com)*

## ASIA-PACIFIC

### IGM Resins (Shanghai) Management Co., Ltd.

Unit 2305-2307, Building 1,  
Landmark Center, No. 88  
North Sichuan Road,  
Hongkou District, Shanghai,  
200085 PRC  
T: +86 021 52080993  
F: +86 021 52080930

### IGM Resins International Trading Taiwan Ltd.

15F-3, Zhongli City, No. 88  
Zhongshan Road,  
Taoyuan, County 320,  
Taiwan  
T: +886 (0)3 4275 275  
F: +886 (0)3 4275 279

### IGM Japan GK

7th floor, Tsukiji Front  
Building, 2-2-7, Tsukiji,  
Chuo-ku, Tokyo, Japan  
T: +81 3 6260 6341

## AMERICAS

### IGM Resins USA Inc.

3300 Westinghouse Blvd  
Charlotte, NC 28273  
United States of America  
T: +1 704 588 2500  
F: +1 630 5249094

### IGM Resins (Brasil)

Alameda Itajubá, 2738  
Joapiranga - Valinhos  
Brasil  
T: + 55 19 3856-4480  
[comercial@igmresins.com](mailto:comercial@igmresins.com)



#### DISCLAIMER

The information and recommendations provided in this product catalogue are presented in good faith and believed to be correct. IGM Resins makes no representations or warranties as to the completeness or accuracy of the information provided.

The information is provided on the condition that the persons receiving it will make their own assessment as to its suitability for their own purpose and use.

No representations or warranties, either express or implied, of fitness for purpose or of any other nature are made herein with respect to information or product to which the information refers.

PureLine™, PureOmer™, Photomer, Omnimer, Omnilane, Omnipol, Omnirad, Omnicat, Omnivad, and Esacure are registered trademark of IGM Resins.



[sales@igmresins.com](mailto:sales@igmresins.com)  
[www.igmresins.com](http://www.igmresins.com)