

**Energy
Curing**
—
**Product
Guide - Asia**
Version 6



We Enable the Transformation of Light for a Better Future.



ENERGY CURING TECHNOLOGY

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.

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Chemical Identity

Cas No.

POLYMERIC PHOTOINITIATORS FOR SENSITIVE APPLICATIONS

Omnipol BP	Di-ester of carboxymethoxy-benzophenone and polytetramethyleneglycol 250 type II photoinitiator	515136-48-8
Omnipol 2702	Polymeric benzophenone derivative type II photoinitiator	1246194-73-9
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
Omnipol TP	Polymeric TPO-L	-
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

MULTI FUNCTIONAL PHOTOINITIATOR FOR SENSITIVE APPLICATIONS

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

AMINE SYNERGISTS FOR SENSITIVE APPLICATIONS

Omnipol ASA	Poly(ethylene glycol) bis(p-dimethylaminobenzoate)	71512-90-8
Esacure A 198	Difunctional amine synergist	925246-00-0

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
730	Liquid at room temperature	270, 325		•••	••	•••	••		•
620	Liquid at room temperature	240, 280, 330	••	•••	••	•••	••		•
790	Liquid at room temperature	245, 280, 390	•••	••	•	•	•••	•••	
	Liquid at room temperature	290, 311	•••	••	•	•	•••	•••	
	Liquid at room temperature	360, 395	••	•	••	••	••	•	
1039	Liquid at room temperature	230, 325	••	••	•	••	•••	•••	
1032	Liquid at room temperature	240, 325	••	••	•	••	•••	•••	
418.5	127-133	237, 275, 380	•••	•	••	•••	•••	•••	•
514.6	> 100	315	•••	•••	•••		•	••	•
340.4	45-50	243, 332	••	•••	•••	•••	••	•	•
342.4	> 96		•••	•••	•••		•••		•
408.5	98-110	260	•••	•••	•••		••		••
510	Liquid at room temperature	230, 325		•••	••	••	•••	•••	
413.5	90-96	315	•••	•••	•••	••	•••	•	



	Chemical Identity	Cas No.
Omnirad 819	Bis(2,4,6-trimethylbenzoyl)phenylphosphine oxide	162881-26-7
Omnirad 2100	Blend of Omnirad 819 + Omnirad TPO-L	
Omnirad 2022	Blend of Omnirad 1173 + Omnirad TPO-L + Omnirad 819	
Omnirad 819 DW	Omnirad 819 DW is a dispersion of 45% bis-acylphosphine oxide in water	
Omnirad TPO	2,4,6-trimethylbenzoyl-diphenyl phosphine oxide	75980-60-8
Omnirad TPO-L	Ethyl(2,4,6-trimethylbenzoyl)-phenyl phosphinate	84434-11-7
Omnirad 4265	Omnirad TPO (50% wt) and Omnirad 1173 (50% wt)	75980-60-8 + 7473-98-5
Omnirad 403	Bis(2,6-dimethoxybenzoyl)-2,4,4-trimethylpentylphosphine oxide	145052-34-2
Omnirad 1700	Omnirad 403 (25% wt) and Omnirad 1173 (75% wt)	145052-34-2 + 7473-98-5
Omnirad 1870	Omnirad 403 (70% wt) and Omnirad 184 (30% wt)	145052-34-2 + 947-19-3
Omnirad 1173	2-hydroxy-2-methyl-1-phenylpropanone	7473-98-5
Omnirad 184	1-hydroxycyclohexyl-phenyl ketone	947-19-3
Omnirad 127	2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one	474510-57-1
Omnirad 601	Difunctional alpha hydroxy ketone	71868-15-0
Omnirad 2959	1-[4-(2-hydroxyethoxy)-phenyl]-2-hydroxy-methylpropanone	106797-53-9
Omnirad 1000	Omnirad 1173 (80% wt) and Omnirad 184 (20% wt)	7473-98-5 + 947-19-3
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
Omnirad 379	2-dimethylamino-2-(4-methyl-benzyl)-1-(4-morpholin-4-yl-phenyl)-butan-1-one	119344-86-4
Omnirad 369	2-benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone	119313-12-1
Omnirad 380	Bis(2,4,6-Trimethylbenzoyl)phenylphosphine oxide	162881-26-7

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
418.5	127-133	237, 275, 380	...	.	..	...	...	...	.
	Liquid at room temperature	220, 275, 370	...	.	...	...	...	...	.
	Liquid at room temperature	245, 285, 370	...	.	...	...	...	...	.
	Liquid at room temperature	237, 275, 380	...	.	..	...	...	...	...
348.4	91-94	275, 379	...		...	...	..	...	.
316.4	Liquid at room temperature	230, 275, 370	...	.	..	...	..	...	..
	Liquid at room temperature	239, 275, 379	...	...	...	...	..	.	..
490.5	105-119	300, 350	...	.	.	...	...	...	.
	Liquid at room temperature	244, 300, 350	...	.	..	...	...	..	.
	≥ 97	243, 300, 350	...	..	..	...	...	..	.
164.2	Liquid at room temperature	244, 330	..	...	...	...	..	.	...
204.3	44-50	243, 331	..	...	...	...	..	.	..
340.4	82-90	243, 332	..	...	...	...	..	.	.
342.4	≥ 96	275	...	...	...		...		.
224.3	86-90	274, 330	..	...	...	...	..	.	...
	Liquid at room temperature	280, 325	..	...	...	...	.	.	..
	Liquid at room temperature	260	...	...	.	.	.		.
	Liquid at room temperature	260	...	...	.	.	.		.
	Liquid at room temperature	260	...	...	.	.	.		.
380.5	88-93	233, 320	...	..	.	.	...	..
366.5	110-114	232, 323	...	..	.	.	...	..
418.5	127-133	237	...	.	..	...	...	...	.

	Chemical Identity	Cas No.
Omnirad 907	2-methyl-1-[4-(methylthio)phenyl]-2-morpholinopropan-1-one	71868-10-5
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	
Omnirad BDK	2,2-dimethoxy-2-phenylacetophenone	24650-42-8

PHOTOINITIATORS - TYPE II

Esacure 3644	Ketocoumarin	2243703-91-3
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
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 991	2-ethylhexyl 2-([1,1'-biphenyl]-4-ylcarbonyl)benzoate	75005-95-7
Omnirad BMS	4-(4methylphenylthio)benzophenone	83846-85-9
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 500	Omnirad BP (50% wt) and Omnirad 184 (50% wt)	119-61-9 + 947-19-3
Omnirad 540	Blend	-

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
279.4	73-76	230, 303	...	..	..	..	...	..
	Liquid at room temperature	260, 340	..	..	...	...
256.3	64-67	252, 325	...	...			...	·
	68-71	325, 375	...	...	...		...	...
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	...	...			...	...	..
182.2	45-49	251, 333	·	...	..	..	..		..
196.3	54-58	245, 330	..	...	..	..	..		..
258.3	99-103	285	..	...	..	..	..		..
240.3	48-54	253, 282		...	..	..	..		..
414.5	Liquid at room temperature	290	..	...	...	..	..		..
304.4	75-85	252, 325	..	...	...	..	..		..
	Liquid at room temperature	320, 260	...	...	...	..	..		..
	Liquid at room temperature	250, 330	..	...	...	..	..		..
	Liquid at room temperature	248, 338	..	..	..	..	·		...
	Liquid at room temperature	245	..	...	...	..	·		·

Chemical Identity		Cas No.
AMINE SYNERGISTS		
Omnipol ASA	Poly(ethylene glycol) bis(p-dimethylaminobenzoate)	71512-90-8
Esacure A 198	Difunctional amine synergist	925246-00-0
Omnirad EDB	Ethyl-4-(dimethylamino) benzoate	10287-53-3
Omnirad EHA	2-ethylhexyl-4-dimethylaminobenzoate	21245-02-3

Chemical Identity		Cas No.
ELECTRONICS		
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 379 EG	2-dimethylamino-2-(4-methyl-benzyl)-1-(4-morpholin-4-yl-phenyl)-butan-1-one	119344-86-4
Omnirad 369 E	2-benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone	119313-12-1
Omnirad TPO-S	2,4,6-Trimethylbenzoyl-diphenyl phosphine oxide	75980-60-8
Omnirad 784	Bis (cyclopentadienyl) bis [2,6-difluoro-3-(1-pyrryl)phenyl titanium	125051-32-3

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
510	Liquid at room temperature	230, 325		•••	••	••	•••	•••	
413.5	90-96	315	•••	•••	•••	••	•••	•	
193.2	62-68	228, 308	•••	••	••	••			
277.4	Liquid at room temperature	312	•••	••	••	••			

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
353.4	94-100	355	•••	••					••	
	42-45	330								
	100-120	330								
380.5	88-93	233, 320	•••	••	•	•	•••	••		
366.5	110-114	232, 323	•••	••	•	•	•••	••		
348.4	91 - 94	275, 379	•••		•••	•••	••	•••		•
534.4	165-170	398, 470	•••		•••	•••	•••	•••	•••	

Chemical Identity		Cas No.	Functionality	Typical Viscosity | mPa.s at 25 °C	Colour | APHA max	Tg | °C
PureOmer 4012	Isobornyl acrylate (IBOA)	5888-33-5	1	10	50	88
IBOA	Isobornyl acrylate (IBOA)	5888-33-5	1	9	50	88
Photomer 4034	Caprolactone modified version of HEA	110489-05-9	1	35*	100	
Photomer 4035	Phenoxyethyl acrylate (PEA)	48145-04-6	1	10	60	5
PHEA	Phenoxyethyl acrylate (PEA)	48145-04-6	1	7	50	5
Photomer 4039	Phenol [4 EO] acrylate	56641-05-5	1	30	150	12
Photomer 4141	Cyclic trimethylolpropane formal acrylate (CTFA)	66492-51-1	1	15	100	40
CTFA	Cyclic trimethylolpropane formal acrylate (CTFA)	66492-51-1	1	13	100	40
Photomer 4142	Tetrahydrofurfuryl acrylate (THFA)	2399-48-6	1	8	80	-20
THFA	Tetrahydrofurfuryl acrylate (THFA)	2399-48-6	1	8	100	-20
Photomer 4184	2-[[butylamino)carbonyl]oxy]ethyl acrylate	63225-53-6	1	35	200	-3
Photomer 4211	2-(2-ethoxyethoxy) ethyl acrylate (EOEOEA)	7328-17-8	1	6	60	-53
EOEOEA	2-(2-ethoxyethoxy) ethyl acrylate (EOEOEA)	7328-17-8	1	6	50	-53
Photomer 4808	Octyl decyl acrylate (ODA)	2499-59-4 + 2156-96-6	1	6	60	-53
Photomer 4810	Isodecyl acrylate (IDA)	1330-61-6	1	8	100	-60
IDA	Isodecyl acrylate (IDA)	1330-61-6	1	7	50	-60
PureOmer 4812	Lauryl acrylate (LA)	2156-97-0	1	7	200	-30
LA	Lauryl acrylate (LA)	2156-97-0	1	6	50	-30

* At 40°C

Surface Tension 25°C |
m n/m

Product Attributes

Reactivity

Hardness

Flexibility

Yellowing Resistance

Adhesion

Pigment Wetting

		Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
32	Solvency, adhesion, good flexibility, thermoforming. Bio-based Content (ASTM D6866-21) : 78 %	••	•	••	••	•••	•
32	Solvency, adhesion, good flexibility, thermoforming.	••	•	••	••	•••	•
	Enhanced flexibility, improved chemical resistance and superior hydrolytic stability	••	••	•••		•••	
38	Adhesion, coating hardness, high MW resin compatibilizer	••		•••		•••	•
38	Adhesion, coating hardness, high MW resin compatibilizer	••		•••		•••	•
41	Flexible, low odour, adhesion	•		•••	•	•••	•
36	Adhesion, coating hardness, chemical resistance	••	••	••	•••	•••	
36	Adhesion, coating hardness, chemical resistance	••	••	••	•••	•••	
35	Adhesion, chemical resistance, good weatherability, high solvency		••		••	•••	
35	Adhesion, chemical resistance, good weatherability, high solvency		••		••	•••	
	Flexibility, adhesion, high elongation	•		•••		•••	
31	Adhesion, solvency, high flexibility	•		•••	•••	••	
31	Adhesion, solvency, high flexibility	•		•••	•••	••	
27	Hydrophobic, good wetting properties, good flexibility, good adhesion	•		••	••	••	•
29	Flexibility, hydrophobic, pigment wetting, substrate wetting	•		•••	••		••
29	Flexibility, hydrophobic, pigment wetting, substrate wetting	•		•••	••		••
30	Flexibility, hydrophobic, good adhesion, low shrinkage, Bio-based Content (ASTM D6866-21) : 81 %	•		•••	••	••	
30	Flexibility, hydrophobic, good adhesion, low shrinkage,	•		•••	••	••	



ENERGY CURING RESINS



Chemical Identity		Cas No.	Functionality	Typical Viscosity | mPa.s at 25 °C	Colour | APHA max	Tg | °C
Photomer 4017	Hexanediol diacrylate (HDDA)	13048-33-4	2	8	60	41
HDDA	Hexanediol diacrylate (HDDA)	13048-33-4	2	50	50	41
Photomer 4028	Bisphenol-A [4 EO] diacrylate	64401-02-1	2	1000	150	63
EO4-BPADA	Bisphenol-A [4 EO] diacrylate	64401-02-1	2	900	80	63
EO10-BPADA	Bisphenol-A [10 EO] diacrylate	64401-02-1	2	600	80	
Photomer 4050	Polyethyleneglycol 200 diacrylate (PEG200DA)	26570-48-9	2	20	70	8
PEG(200)DA	Polyethyleneglycol 200 diacrylate (PEG200DA)	26570-48-9	2	23	80	8
Photomer 4054	Polyethyleneglycol 400 diacrylate (PEG400DA)	26570-48-9	2	50	100	3
PEG(400)DA	Polyethyleneglycol 400 diacrylate (PEG400DA)	26570-48-9	2	28	80	3
Photomer 4056	Polyethyleneglycol 600 diacrylate (PEG600DA)	26570-48-9	2	100	100	-42
PEG(600)DA	Polyethyleneglycol 600 diacrylate (PEG600DA)	26570-48-9	2	105	80	-42
Photomer 4061	Tripropyleneglycol diacrylate (TPGDA)	42978-66-5	2	14	100	64
TPGDA-H	Tripropyleneglycol diacrylate (TPGDA)	42978-66-5	2	15	50	64
TEGDA	Triethylene glycol diacrylate (TEGDA)	1680-21-3	2	13	50	
Photomer 4071	3 methyl-1.5-pentanediol diacrylate (MPDDA)	64194-22-5	2	8.5	120	50
NPGDA	Neopentyl glycol diacrylate (NPGDA)	2223-82-7	2	10	50	
Photomer 4127	Neopentylglycol [PO] diacrylate (NPGPODA)	84170-74-1	2	15	80	35
PO2-NPGDA	Neopentylglycol [PO] diacrylate (NPGPODA)	84170-74-1	2	15	50	35
Photomer 4226	Dipropyleneglycol diacrylate (DPGDA)	57472-68-1	2	10	60	96
DPGDA	Dipropyleneglycol diacrylate (DPGDA)	57472-68-1	2	10	50	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	

Surface Tension 25°C | m n/m

Product Attributes

Reactivity
Hardness
Flexibility
Yellowing Resistance
Adhesion
Pigment Wetting

Surface Tension 25°C | m n/m	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
35	Adhesion, chemical resistance, high solvency and cutting power	•••	•••	•	•••	•••	••
35	Adhesion, chemical resistance, high solvency and cutting power	•••	•••	•	•••	•••	••
43	Gloss, low shrinkage, low skin irritation, litho additive	••	••		••	••	•••
43	Gloss, low shrinkage, low skin irritation, litho additive	••	••		••	••	•••
	Gloss, low shrinkage, low skin irritation, litho additive	••	••		••	••	•••
39	Flexibility, flow and leveling, water dispersible	••	•	••	••	••	
39	Flexibility, flow and leveling, water dispersible	••	•	••	••	••	
40	Flexibility, water dispersible, low volatility	•	•	••	••	••	
40	Flexibility, water dispersible, low volatility	•	•	••	••	••	
41	Flexibility, water dispersible, low volatility	•	•	••	••	••	
41	Flexibility, water dispersible, low volatility	•	•	••	••	••	
32	Versatile, good flexibility and high reactivity	••	••	•	••	••	•
32	Versatile, good flexibility and high reactivity	••	••	•	••	••	•
	Versatile, good flexibility and high reactivity	••	••	•	••	••	•
33	Low odour, adhesion, high solvency and cutting power	•••	•••	•	•••	•••	••
	High reactivity, coating hardness, tensile strength	•••	••	••	•••	••	•••
32	Pigment wetting, flow and leveling, low shrinkage, low tension surface	••		••	••	•	••
32	Pigment wetting, flow and leveling, low shrinkage, low tension surface	••		••	••	•	••
33	Pigment wetting, high reactivity, high solvency and cutting power	••	••	•	••	••	•
33	Pigment wetting, high reactivity, high solvency and cutting power	••	••	•	••	••	•
38	Pigment wetting, flow and leveling	••	••	•	••	•••	••
34	Pigment wetting, flow and leveling	••	••	•	••	•••	••

ENERGY CURING RESINS

Chemical Identity		Cas No.	Functionality	Typical Viscosity | mPa.s at 25 °C	Colour | APHA max	Tg | °C
Photomer 4006	Trimethylolpropane triacrylate (TMPTA)	15625-89-5	3	100	50	62
TMPTA	Trimethylolpropane triacrylate (TMPTA)	15625-89-5	3	90	30	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
GPTA	Glyceryl [4 PO] triacrylate (GPTA)	52408-84-1	3	80	50	33
Photomer 4149	Trimethylolpropane [3 EO] triacrylate (TMP3EOTA)	28961-43-5	3	63	50	37
EO3-TMPTA	Trimethylolpropane [3 EO] triacrylate (TMP3EOTA)	28961-43-5	3	50	50	37
Photomer 4154	Trimethylolpropane [4 EO] triacrylate (TMP4EOTA)	28961-43-5	3	67	80	
EO6-TMPTA	Ethoxylated (6) trimethylolpropane triacrylate	28961-43-5	3	103	50	
Photomer 4157	Trimethylolpropane [9 EO] triacrylate (TMP9EOTA)	28961-43-5	3	105	100	-12
EO9-TMPTA	Trimethylolpropane [9 EO] triacrylate (TMP9EOTA)	28961-43-5	3	90	80	-12
Photomer 4158	Trimethylolpropane [15 EO] triacrylate (TMP15EOTA)	28961-43-5	3	170	150	-32
Photomer 4159	Trimethylolpropane [20 EO] triacrylate (TMP20EOTA)	28961-43-5	3	250	60	-32
EO15-TMPTA	Trimethylolpropane [15 EO] triacrylate (TMP15EOTA)	28961-43-5	3	150	60	-32
Photomer 4172	Pentaerythritol [5 EO] tetraacrylate (PPTTA)	51728-26-8	4	160	100	36
EO5-PET4A	Pentaerythritol [5 EO] tetraacrylate (PPTTA)	51728-26-8	4	130	60	36
Photomer 4306	Ditrimethylolpropane tetra-acrylate (DiTMPTA)	94108-97-1 / 1393932-71-2	4	550	100	96
DI-TMPTA	Ditrimethylolpropane tetra-acrylate (DiTMPTA)	94108-97-1 / 1393932-71-2	4	550	50	96
Photomer 4307	Ditrimethylolpropane tetra-acrylate (DiTMPTA)	94108-97-1 / 1393932-71-2	4	650	300	

*Product free of Bisphenol A

Surface Tension 25°C | m n/m	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
50	High reactivity, coating hardness, chemical resistance	...	...	.	...	..	.
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 %	...	..	..	..	.	...
33	Pigment wetting, flexibility, impact resistance	...	..	..	..	.	...
38	High reactivity, coating hardness, tensile strength	...	..	..	...	..	...
38	High reactivity, coating hardness, tensile strength	...	..	..	...	..	...
	High reactivity, coating hardness, tensile strength, low TMPTA content	...	..	..	...	..	...
	High reactivity, coating hardness, tensile strength, low TMPTA content	...	..	..	...	..	...
39	Flexibility, impact resistance, abrasion resistance, water dispersible	..	..	...	...	..	...
39	Flexibility, impact resistance, abrasion resistance, water dispersible	..	..	...	...	..	...
39	Flexibility, impact resistance, abrasion resistance, water dispersible	..	..	...	...	..	...
	Flexibility, impact resistance, water dispersible	..	..	...	...	..	...
39	Flexibility, impact resistance, abrasion resistance, water dispersible	..	..	...	...	..	...
38	High reactivity, dispersive properties, flexibility, high purity and low solvent content	...	...	.	..	..	..
38	High reactivity, dispersive properties, flexibility, high purity and low solvent content	...	...	.	..	..	..
35	High reactivity	...		.	..	.	..
35	High reactivity	...		.	..	.	..
35	High reactivity	...		.	..	.	..



	Chemical Identity	Cas No.	Functionality	Typical Viscosity | mPa.s at 25 °C	Colour | APHA max	Tg | °C
Photomer 4308	Ditrimethylolpropane tetra-acrylate (DiTMPTA)	1393932-71-2	4	1000		
Photomer 4335	Pentaerythritol tri and tetraacrylate (PETIA)	1245638-61-2	3.5	650	100	100
PETA	Pentaerythritol tri and tetraacrylate (PETIA)	1245638-61-2	3.5	1000	50	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
DPHA	Dipentaerythritol Penta/Hexaacrylate (DPHA)	1384855-91-7	5	8000	100	94

Surface Tension 25°C | m n/m	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
	High reactivity, high cross-linking density	•••		•	••	•	••
	High reactivity, low viscosity	•••		•	••	•••	•
	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	•••	•••	•	••	••	•••
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 | %
PureOmer 3005	Acrylated epoxy soy oil (ESBOA)	2	20000	25	7	1150	16
F03	Acrylated epoxy soy oil (ESBOA)	2	20000	25		1150	16
Photomer 3016	Bisphenol A epoxy diacrylate	2	5500	60	1		
F01-100	Bisphenol A epoxy diacrylate	2	7000	60	1		
F01-90A	Bisphenol A epoxy diacrylate diluted with 10% TPGDA	2	7000	60	1		
Photomer 3016-20G	Bisphenol A epoxy diacrylate diluted with 20% GPTA	2	75000	25	1		
F01-80G	Bisphenol A epoxy diacrylate diluted with 20% GPTA	2	75000	25	1		
Photomer 3016-20D	Bisphenol A epoxy diacrylate diluted with 20% DPGDA	2	30000	25	1		
F01-80D	Bisphenol A epoxy diacrylate diluted with 20% DPGDA	2	15000	25	1		
Photomer 3016-20H	Bisphenol A epoxy diacrylate diluted with 20% HDDA	2	8000	25	1		
F01-80B	Bisphenol A epoxy diacrylate diluted with 20% HDDA	2	13000	25	1		
Photomer 3016-20R	Bisphenol A epoxy diacrylate diluted with 20% TPGDA	2	23000	25	1		2
F01-80A	Bisphenol A epoxy diacrylate diluted with 20% TPGDA	2	30000	25	1		2
Photomer 3016-20T	Bisphenol A epoxy diacrylate diluted with 20% TMPTA	2	50000	25	1		
F01-80C	Bisphenol A epoxy diacrylate diluted with 20% TMPTA	2	65000	25	1		
Photomer 3016-25G	Bisphenol A epoxy diacrylate diluted with 25% GPTA	2	40000	25	2		
Photomer 3016-25R	Bisphenol A epoxy diacrylate diluted with 25% TPGDA	2	15000	25	1	7800	5
F01-75A	Bisphenol A epoxy diacrylate diluted with 25% TPGDA	2	20000	25	1	7800	5
Photomer 3016-25T	Bisphenol A epoxy diacrylate diluted with 25% TMPTA	2	45000	25	1		

Tg | °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
8	Flexibility, excellent pigment wetting. Bio-based Content (ASTM D6866-21) : 84 %	•	•	••	••	•	•••
8	Flexibility, excellent pigment wetting.	•	•	••	••	•	•••
60	Gloss, chemical resistance, coating hardness	••	•••	•	•	•	••
60	Gloss, chemical resistance, coating hardness	••	•••	•	•	•	••
	Gloss, chemical resistance, improved flexibility	••	•••	•	•	•	••
	Gloss, chemical resistance, improved flexibility	••	•••	•	•	•	••
	Gloss, chemical resistance, improved flexibility	••	•••	•	•	•	••
	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
	Gloss, chemical resistance	••	••	•	•	••	••
	Gloss, chemical resistance	••	••	•	•	••	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
38	Cure speed, chemical resistance, coating hardness	•••	•••	•	•	•	••
38	Cure speed, chemical resistance, coating hardness	•••	•••	•	•	•	••
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	•	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	••	••

ENERGY CURING RESINS



Chemical Identity		Functionality	Typical Viscosity | mPa.s at T °C	T | °C	Colour | Gardner max	Tensile Strength | psi	Elongation | %
F01-75C	Bisphenol A epoxy diacrylate diluted with 25% TMPTA	2	45000	25	1		
F01-70G	Bisphenol A epoxy diacrylate diluted with 30% GPTA	2	20000	25	1		
F01-70A	Bisphenol A epoxy diacrylate diluted with 30% TPGDA	2	20000	25	1		
Photomer 3016-40G	Bisphenol A epoxy diacrylate diluted with 40% GPTA	2	1700	40	1		
Photomer 3016-40R	Bisphenol A epoxy diacrylate diluted with 40% TPGDA	2	2000	25	1		
F01-60A	Bisphenol A epoxy diacrylate diluted with 40% TPGDA	2	2000	25	1		
Photomer 3016-40T	Bisphenol A epoxy diacrylate diluted with 40% TMPTA	2	7500	25	1		
F01-60C	Bisphenol A epoxy diacrylate diluted with 40% TMPTA	2	10000	25	1		
PureOmer 3026	Epoxy diacrylate	2	6000	60	1		
PureOmer 3026-20G	Epoxy diacrylate diluted with 20% GPTA	2	85000	25	1		
PureOmer 3026-40G	Epoxy diacrylate diluted with 40% GPTA	2	9000	25	1		
Photomer 3701	Cresol novolac epoxy acrylate diluted in 40% TMPTA	3	10000	25	5		

Tg | °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	••	••
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	••	••
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	••	••
	Gloss, chemical resistance, improved flexibility	•••	•••	•	•	••	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
53	Chemical resistance, cure speed	•••	•••	•	•	••	••
53	Chemical resistance, cure speed	•••	•••	•	•	••	••
	High reactivity, low odor, chemical resistance, improved flexibility Bio-based Content (ASTM D6866-21) : 21 %	••	•••	•	•	•	••
	High reactivity, low odor, chemical resistance, improved flexibility Bio-based Content (ASTM D6866-21) : 19,6 %	•••	•••	•	•	•	••
	High reactivity, low odor, chemical resistance, improved flexibility Bio-based Content (ASTM D6866-21) : 18,2 %	•••	•••	•	•	•	••
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 | %
LP 103	Polyester Acrylate	2	4000	25	1		
Photomer 5010	Matting resin	2	Thixotropic Gel	25			
Photomer 5419	Tetrafunctional Polyester Acrylate	4	400	25	2		
Photomer 5425	Polyester Acrylate	2	30000	25			
Photomer 5429	Polyester tetraacrylate	4	400	25	2	1870	10
PureOmer 5433	Polyester tetraacrylate	4	4500	60			
Photomer 5438	Chlorinated Polyester Acrylate	3	110000	25	5		
Photomer 5439	Polyester Acrylate tetrafunctional	4	275	25	2	1870	10
PureOmer 5437	Polyester tetraacrylate	4	9500	25	5		
Photomer 5442	Polyester acrylate hexaacrylate	6	9500	25	15		
PureOmer 5443	Polyester hexaacrylate	6	32500	25			
Photomer 5444	Modified polyester acrylate	4	30000	25	4		
PureOmer 5450	Fatty acid modified polyester hexaacrylate	6	9500	25	15		
Photomer 9144	Unsaturated polyester oligomer diluted in DPGDA	2	12500	25	4		
Photomer 9145	Unsaturated polyester oligomer diluted in DPGDA	2	11000	25	4		

POLYETHER ACRYLATES

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

Tg | °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
	Good flexibility, excellent adhesion, good pigment wetting	•	•	•••	•	•••	••
	Self-matting, low gloss	•••	••	••	•	•••	•••
31	Good adhesion to metal substrate, pigment wetting, scuff 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, excellent adhesion to metal and plastics, good pigment wetting	••	•	•••		•••	•••
	Fast curing rapidly, good adhesion particularly to metal substrates, good pigment wetting	•••	•	••		•••	•••
	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 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 6580	Aliphatic urethane diacrylate	2	30000	25	1		
Photomer 6620	Aliphatic urethane diacrylate	2	40000	25	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 6642	Aliphatic urethane triacrylate	3	50000	25	2		
Photomer 6644	Aliphatic urethane diacrylate	2	20000	25	2	284	300
Photomer 6645	Aliphatic urethane diacrylate	2	35000	25	1	994	760
Photomer 6648 ◊	Aliphatic urethane tetraacrylate	4	8000	25	150 Apha		
Photomer 6692 ◊	Aliphatic urethane hexaacrylate	6	5500	25	2		
Photomer 6718 ◊	Aliphatic Urethane triacrylate	3	16000	60	1		
Photomer 6710	Aliphatic urethane diacrylate	2	7500	25	1	2300	45

◊Tin Free

T _g | °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	••	•	•••	•••	•••	
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	••	••	•••	•••	•••	
	Excellent light stability and outstanding haze, scratch and abrasion resistance	••	••	•••	•••	••	••
33	Good toughness and flexibility	••	••	•••	••	•	
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	••	••	••	•••	•••	
	Fast cure, good flexibility, hardness	••	••	••	••		
-37	High elongation, excellent flexibility, adhesion	•	••	•••	•••	•••	
-39	Very high elongation, excellent flexibility, good abrasion resistance, adhesion	•	••	•••	•••	•••	
	Tin free, good mechanical and chemical resistance, good abrasion resistance in combination with high flexibility	•••	•••	•••		••	
	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	••	•••	••	•••	•	
28	Good mechanical properties and flexibility, good stability	••	••	•••	•••	•••	

Chemical Identity		Functionality	Typical Viscosity | mPa.s at T °C	T | °C	Colour | Gardner max	Tensile Strength | psi	Elongation | %
Photomer 6721	Aliphatic urethane diacrylate	2	7500	25	1	2300	45
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		

Tg | °C	Product Attributes	Reactivity	Hardness	Flexibility	Yellowing Resistance	Adhesion	Pigment Wetting
28	Good mechanical properties and flexibility, good stability	••	••	•••	•••	•••	
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
Photomer 2203	Acid functional methacrylate	2	1250	3	320	
Photomer 4173	Acid functional acrylate	1	4000	1	210	
Photomer 4703	Acid functional acrylate	1	190	2	290	
Photomer 5028	Chlorinated polyester 40% of GPTA	3	95000	3	25	53
Photomer 5042	Chlorinated polyester 40% of TMPTA	3	125000	3	20	
PureOmer 5437	Polyester tetraacrylate	4	9500	5	15	
Photomer 9502	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
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METHACRYLATES

Photomer 2006	Trimethylolpropane trimethacrylate (TMPTMA)	3290-92-4	3	43	70
TMPTMA	Trimethylolpropane trimethacrylate (TMPTMA)	3290-92-4	3	43	70
TEGDMA	Triethylene glycol dimethacrylate (TEGDMA)	109-16-0	2	15	80
DEGDMA	Di(ethylene glycol) dimethacrylate (DEGDMA)	2358-84-1	2	7	80
HDDMA	Hexanediol dimethacrylate(HDDMA)	6606-59-3	2	7	60
PureOmer 2012	Isobornyl methacrylate (IBOMA)	7534-94-3	1	6	50
IBOMA	Isobornyl methacrylate (IBOMA)	7534-94-3	1	6	60
EO10-BPADMA	Bisphenol-A [10 EO] dimethacrylate	41637-38-1	2	575	60
Photomer 2050	Polyethyleneglycol 200 di- methacrylate (PEG200DMA)	25852-47-5	2	14	60
Photomer 2203	Acid functional methacrylate	25212-88-8	2	1250	3 G
Photomer 2317	Hydroxypropyl methacrylate (HPMA)	213-090-3	1		30

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		•••	••	•	•••
0.1	27	32	Chemical and impact resistance, hardness		•••	••	•	•••
0.5			Chemical and impact resistance, hardness		•••	••	•	•••
0.15			Chemical and impact resistance, hardness		•••	••	•	•••
0.2			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 %	•	•	••	•••	
0.2	150	31	Adhesion, flexibility, low shrinkage, abrasion resistance, high Tg (150)	•	•	••	•••	
0.5			Heat resistance, chemical resistance, flexibility	•	•	••	•	
0.5		35	Heat resistance, chemical resistance, flexibility	•	•	••	•	
320			Adhesion to especially metal and glass	•	•	•••	•••	
1.5			Adhesion to especially metal and plastic, hydrophilic	•	•	••	•••	



	Chemical Identity	Cas No.	Functionality	Typical Viscosity | mPa.s at 25 °C	Colour | APHA max
Photomer 2318	Hydroxyethyl Methacrylate (HEMA)	868-77-9	1		30
Photomer 2812	Lauryl methacrylate (LMA)	142-90-5	1	6	100
LMA	Lauryl methacrylate (LMA)	142-90-5	1	6	50

	Chemical Identity	Functionality
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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
RA P113	Acrylated amine synergist	1
Photomer 5006	Acrylated amine synergist	1

	Chemical Identity	Cas No.
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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

Acid Value | mg koh/g max	Tg | °C	Surface Tension 25°C | m n/m	Product Attributes	Reactivity	Hardness	Flexibility	Adhesion
0.3	55		Soluble in water, raw material for polymer synthesis	•			••
0.1	-65	28.9	Low shrinkage, good flexibility, hydrophobic, good weather resistance	•	••	••	••
0.1	-65	28.9	Low shrinkage, good flexibility, hydrophobic, good weather resistance	•	••	••	••

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	•••	•	•	•	
23	100	Cure speed, high reactivity, chemical resistance, oxygen inhibitor	•••	•	•	•	
73	2	Cure speed, high reactivity, chemical resistance, oxygen inhibitor	•••	•	•	•	

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

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%)

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**

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	..	..	...	...	...
7473-98-5	Liquid at room temperature	244, 330	..	...	...	..	..	·
5495-84-1	70-76	255, 384	...	..			...	...
Product Attributes				Reactivity	Hardness	Flexibility	Yellowing	Adhesion
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
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RHEOLOGY MODIFIER

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

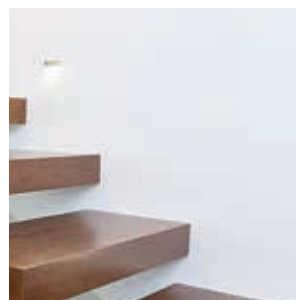
OPTICAL BRIGHTENER

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
SILICONE-FREE FOAM CONTROL ADDITIVES				
Omnivadd WD 2020	Before or after processing	0.1-0.7	20	Acid-cure and NC-curtain coating systems, unsaturated polyester and gelcoats
Omnivadd ED 2164	Before or after processing	0.1-0.7	20	Ideal for use in acid-cure and NC-curtain coating systems, as well as unsaturated polyester and gelcoat systems
Omnivadd WD 2720	Before or after processing	0.1-1.0	-	Unsaturated polyester, epoxy and polyurethane systems
SILICONE-CONTAINING FOAM CONTROL ADDITIVES				
Omnivadd WD 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
Omnivadd WD 2723	Prior to processing	0.5-1.5	100	Solvent-free epoxy and polyurethane systems, low odour
SILICONE-FREE SLIP & LEVELLING ADDITIVES				
Omnivadd XF 3260	End of process	0.05-1.0	100	Wetting, levelling and flow control agent with excellent anti-cratering properties
SILICONE-CONTAINING SLIP & LEVELLING ADDITIVES				
Omnivadd XF 3230	Any stage	0.05-0.5	100	100% version of ADD-3030
Omnivadd XF 3236	After thinning	0.02-0.3	100	Solvent borne wood finishes, industrial coatings and solvents-free coatings
Omnivadd XF 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
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HIGH MOLECULAR WEIGHT DISPERSANTS BASED ON POLYURETHANE CHEMISTRY

Omnivadd EP 4035	10	25-50	15-25	100	Particularly effective at stabilizing pigments in non-polar systems, such as alkyds, acrylates, TPA, and epoxides. Solvent-free additive suitable for both solvent-free and solvent-borne coatings
Omnivadd XP 4047	10	30-50	15-25	35	High quality industrial finishes including automotive OEM and refinish
Omnivadd SP 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

Dosage based on Pigment / Bentonite | %

	Inorganics	Organics	Bentonite	Active content %	Product Attributes
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LOW MOLECULAR WEIGHT DISPERSANTS

Omnivadd SP 5207	0.5-5.0	2.0-5.0	-	100	Solvent borne architectural and decorative paints
Omnivadd SP 5217	0.5-5.0	-	-	100	Solvent borne, solventless coatings and printing inks. Excellent for Titanium Dioxide and extenders

MODERN LOW MOLECULAR WEIGHT DISPERSANTS

PureVadd 6220	5-10	10-20	15-20	100	Hybrid dispersant to improve compatibility and color acceptance of universal colorants in base paints
Omnivadd XP 6212	5-10	-	-	100	Acidic polyether, dispersant for solvent-based and solvent-free coatings and composite
Omnivadd XP 6230	1-3	-	-	100	Aliphatic polyether with acidic groups

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
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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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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 %
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EPOXY ACRYLATES

PureOmer 3005	Acrylated epoxy soy oil (ESBOA)	84	2	20000	25	7	1150	16
PureOmer 3026	Epoxy diacrylate	21	2	6000	60	1		
PureOmer 3026-20G	Epoxy diacrylate diluted with 20% GPTA	19,6	2	85000	25	1		
PureOmer 3026-40G	Epoxy diacrylate diluted with 40% GPTA	18,2	2	9000	25	1		

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	•	•	••	••	•	•••
	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	•••	••	•••	••	••	••

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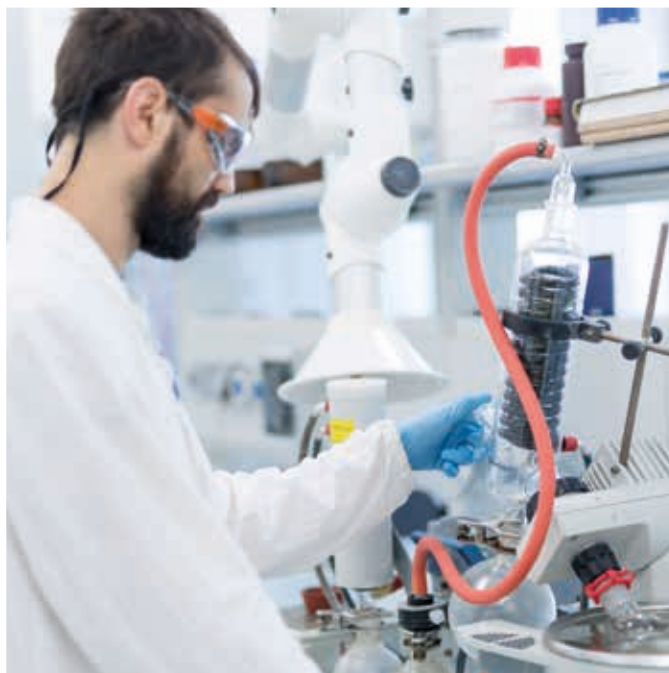


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