



## UV / EB radcure Product Guide



### 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.

Photomer is a registered trade mark of IGM Resins

Connect with us

**E** sales@igmresins.com  
**W** www.igmresins.com



Version 5.1 2014

## Table of contents

Photoinitiators	4
Acrylates	12
Cationics	30
Additives	34
Application solutions	42
Technical Support	46
Contact information	47

## We bring it all together

IGM Resins is a leading manufacturer and supplier of photoinitiators, oligomers, monomers, additives and other customized specialties to the UV radcure industry globally.

As the only manufacturer and supplier 100% dedicated to energy curing IGM Resins is investing heavily to grow with this dynamic market sector.

We are consistently expanding our capabilities in R&D, product development and manufacturing to provide class leading products and services to our customers and to partner with them in developing the next generation of photoinitiators and other key UV raw materials.

## How to get more from us

This product catalogue gives details of all the products currently offered to the UV radcure industry by IGM Resins. Our network of offices and distribution centers globally are established in all major UV radcure markets to offer customer focused and efficient supply. Our customer service is world class.

Application focused laboratories and 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.

## PHOTOINITIATORS - TYPE I

	CHEMICAL IDENTITY	CAS NO.	MOLECULAR WEIGHT I G / MOL	MELTING POINT   °C	UV-ABSORPTION [NM] LAMBDA MAX	THROUGH CURE	SURFACE CURE	CLEAR SYSTEMS	WHITE SYSTEMS	PIGMENTED SYSTEMS	LED CURE	WATER BASED SYSTEMS
Omnirad 73	2-Hydroxy-2-methyl-1-phenylpropanone	7473-98-5	164,2	Liquid at roomtemp	244, 330	••	•••	•••	•••	••	•	•••
Omnirad 481	1-Hydroxycyclohexyl-phenyl ketone	947-19-3	204,3	44 - 50	243, 331	••	•••	•••	•••	••	•	••
Omnirad 659	1-[4-(2-hydroxyethoxy)-phenyl]-2-hydroxy-2-methylpropanone	106797-53-9	224,3	86 - 90	274, 330	••	•••	•••	•••	••	•	•••
Omnirad 248	2-Benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone	119313-12-1	366,5	110 - 114	232, 323	•••	••	•	•	•••	••	
Omnirad 4817	2-Methyl-1-[4-(methylthio)phenyl]-2-morpholinopropan-1-one	71868-10-5	279,4	73 - 76	230, 303	•••	••	••	••	•••	••	
Omnirad 4800	Proprietary	Proprietary		122 - 125	231, 307	•••	••	•	•	•••	••	
Omnirad 4265	Omnirad-TPO (50% wt) & Omnirad-73 (50% wt)	75980-60-8 & 7473-98-5		Liquid at roomtemp	239, 275, 379	•••	•••	•••	•••	••	•	••
Omnirad 1000	Omnirad 73 (80% wt) & Omnirad 481 (20% wt)	7473-98-5 & 947-19-3		Liquid at roomtemp	280, 325	••	•••	•••	•••	•	•	••
Omnirad BDK	2,2-Dimethoxy-2-phenylacetophenone	24650-42-8	256,3	64 - 67	252, 325	•••	•••			•••	•	
Omnirad TPO	2,4,6-Trimethylbenzoyl-diphenyl phosphine oxide	75980-60-8	348,4	91 - 94	275, 379	•••		•••	•••	••	•••	•
Omnirad TPO - L	Ethyl[2,4,6-Trimethylbenzoyl]-phenyl phosphinate	84434-11-7	316,4	Liquid at roomtemp	230, 275, 370	•••		•••	•••	••	•••	••
Omnirad 380	Bis[2,4,6-Trimethylbenzoyl]phenylphosphine oxide	162881-26-7	418,5	127 - 133	237, 275, 380	•••		•••	•••	•••	•••	•

ACRYLATES

CATIONICS

ADDITIVES

APPLICATION SOLUTIONS

PHOTOINITIATORS - TYPE II

	CHEMICAL IDENTITY	CAS NO.	MOLECULAR WEIGHT   G / MOL	MELTING POINT   °C	UV-ABSORPTION [NM] LAMBDA MAX	THROUGH CURE	SURFACE CURE	CLEAR SYSTEMS	WHITE SYSTEMS	PIGMENTED SYSTEMS	LED CURE	WATER BASED SYSTEMS
Omnirad BP Flakes	Benzophenone	119-61-9	182,2	45 - 49	251, 333	••	•••	••	••	••		••
Omnirad 4MBZ	4-Methyl benzophenone	134-84-9	196,3	54 - 58	245, 330	••	•••	••	••	••		••
Omnirad 4PBZ	4-Phenyl benzophenone	2128-93-0	258,3	99 - 103	285	••	•••	••	••	••		••
Omnirad 410	4-Phenyl benzophenone (Finer Grade)	2128-93-0	258,3	99 - 103	285		•••	••	••	••		
Omnirad OMBB	Methyl-o-benzoylbenzoate	606-28-0	240,3	48 - 54	253, 282		•••	••	••	••		••
Omnirad BMS	4-[4methylphenylthio]benzophenone	83846-85-9	304,4	75 - 85	252, 325	••	•••	•••	••	••		••
Omnirad 4HBL	4-Hydroxyl Benzophenone Laurate	142857-24-7	380,5	48 - 51	260		••	••				
Omnirad BEM	Mixture of Benzophenones	119-61-9 & 131-58-8 & 134-84-9		Liquid at roomtemp	255, 330	••	•••	••	••	••		••
Omnirad 500	Omnirad BP (50% wt) & Omnirad 481 (50% wt)	119-61-9 & 947-19-3		Liquid at roomtemp	248, 338	••	••	••	••	•		•••
Omnirad 81	Benzophenone & 4-methyl benzophenone	119-61-9 & 134-84-9		Liquid at roomtemp	255, 330	••	•••	••	••	••		••
Omnirad ITX	2-Isopropyl thioxanthone	5495-84-1	254,3	70 - 76	255, 384	•••	••			•••	•••	
Omnirad DETX	2,4-Diethylthioxanthone	82799-44-8	268,4	71 - 74	261, 385	•••	••			•••	•••	
Omnirad MBF	Methylbenzoylformate	15206-55-0	164,2	Liquid at roomtemp	255, 325		•••	•••	••	•		•••
Omnirad EMK	4,4'bis(diethylamino) benzophenone	90-93-7	324,5	94 - 96	248, 374	•••	•••			•••	•••	••

PHOTOINITIATORS

ACRYLATES

CATIONICS

ADDITIVES

APPLICATION SOLUTIONS

POLYMERIC PHOTOINITIATORS												
	CHEMICAL IDENTITY	CAS NO.	MOLECULAR WEIGHT   G / MOL	MELTING POINT   °C	UV-ABSORPTION [NM] LAMBDA MAX	THROUGH CURE	SURFACE CURE	CLEAR SYSTEMS	WHITE SYSTEMS	PIGMENTED SYSTEMS	LED CURE	WATER BASED SYSTEMS
Omnipol 910	Piparazino based aminoalkylphenone	886463-10-1	1039	Liquid at roomtemp	230, 325	••	••	•	••	•••	•••	
Omnipol 9210	Piparazino based aminoalkylphenone diluted in monomer	886463-10-1 & 51728-26-8	1032	Liquid at roomtemp	240, 325	••	••	•	••	•••	•••	
Omnipol 9220	Piparazino based aminoalkylphenone diluted in monomer	886463-10-1 & 28961-43-5		Liquid at roomtemp	240, 325	••	••	•	••	•••	•••	
Omnipol BP	Di-ester of carboxymethoxy-benzophenone and polytetramethyleneglycol 250	515136-48-8	730	Liquid at roomtemp	270, 325		•••	••	•••	••		•
Omnipol 682	Di ester of carboxymethoxybenzophenone and polyethyleneglycol 200		682	Liquid at roomtemp	240, 280, 340		•••	••	•••	••		•
Omnipol 2702	Polymeric Bezophenone derivative	1246194-73-9	620	Liquid at roomtemp	240, 280, 330	••	•••	••	•••	••		•
Omnipol TX	Di-ester of carboxymethoxy thioxanthone and polytetramethyleneglycol 250	813452-37-8	790	Liquid at roomtemp	245, 280, 390	•••	••	•	•	•••	•••	
Omnipol 2712	Polymeric Methyl Benzoylformate		514	Liquid at roomtemp	260, 350		••	•••	•••			••
POLYMERIC SYNERGISTS												
Omnipol ASA	Poly(ethylene glycol) bis(p-dimethylaminobenzoate	71512-90-8	510	Liquid at roomtemp	230, 325		•••	••	••	•••		
Omnipol SZ	Polyethylene Glycol(200)di[β-(4(pacetylphenyl)piperazine)] propionate		716 716	Liquid at roomtemp	240, 320	••	•••	•	•	•••	•	

## AMINE SYNERGISTS

	CHEMICAL IDENTITY	CAS NO.	MOLECULAR WEIGHT   G / MOL	MELTING POINT   °C	UV-ABSORPTION [NM] LAMBDA MAX	THROUGH CURE	SURFACE CURE	CLEAR SYSTEMS	WHITE SYSTEMS	PIGMENTED SYSTEMS	VISIBLE LIGHT CURING	LED CURE	WATER BASED SYSTEMS
Omnirad DMB	2-Dimethylamino-ethylbenzoate	2208-05-1	193,2	Liquid at roomtemp	270		•••	••	••				
Omnirad EDB	Ethyl-4-(dimethylamino) benzoate	10287-53-3	193,2	62-68	228, 308		•••	••	••	••			
Omnirad EHA	2-Ethylhexyl-4-dimethylaminobenzoate	21245-02-3	277,4	185-195	312		•••	••	••	••			••
Omnirad IADB	Isoamyl-4-(dimethylamino)benzoate	21245-01-2	235,3	Liquid at roomtemp	200, 309		•••	••	••	••			••
SPECIALTIES													
Omnirad 784	Bis (cyclopentadienyl) bis [2,6-difluoro-3-(1-pyrryl)phenyl titanium	125051-32-3	534,4	168 - 170	398,47	•••		•••	•••	•••	•••	•••	
Omnirad BCIM	2,2'-bis(2-chlorophenyl)-4,4',5,5'-tetraphenyl-2'h-1,2'-biimidazole	1707-68-2	659,6	200-204	270						•••		
Omnirad LCV	4,4',4''-methylidynetris(N,N-dimethylalanine) Leuco Crystal Violet	603-48-5	373,5	177 - 182	208						•••		

## MONO-FUNCTIONAL MONOMERS

	CHEMICAL IDENTITY	CAS NO.	FUNCTIONALITY	TYPICAL VISCOSITY   MPA.S AT 25 °C	COLOUR (APHA) MAX	TG (°C)	SURFACE TENSION AT 25°C (M N/M)	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION	PIGMENT WETTING
Photomer 4003	Nonyl phenol [4 EO] acrylate (NP4EOA)	50974-47-5	1	100	200	-27	35	Adhesion, flow & leveling, high MW resin compatibilizer, flexibility	••		••		••	
Photomer 4012	Isobornyl acrylate (IBOA)	5888-33-5	1	10	50	88	33	Solvency, adhesion, high flexibility	••	•	•	••	•••	•
Photomer 4035	Phenoxyethyl acrylate (PEA)	48145-04-6	1	11	25	5	40	Adhesion, coating hardness, high MW resin compatibilizer	••		•••	•	•••	•
Photomer 4039	Phenol [2,5 EO] acrylate	56641-05-5	1	20	150		41	Low viscosity, flexible, low odour	•		•••	•	•••	•
Photomer 4066	Ethoxylated Nonylphenol Monoacrylate	50974-47-5	1	113	100			Flexibility, adhesion	••		•••	••	•••	
Photomer 4135	o-phenylphenoxyethyl acrylate (OPPEOA)	72009-86-0	1	135	100			High refractive index	•				••	
Photomer 4141	Cyclic Trimethylolpropane Formal Acrylate (CTFA)	66492-51-1	1	15	100	40	36	Adhesion, coating hardness, chemical resistance	••	••		•••	••	
Photomer 4142	Tetrahydrofurfuryl Acrylate (THFA)	2399-48-6	1	8	80	-20	35	Adhesion, chemical resistance, good weatherability	•	••		••	•••	
Photomer 4184	2-[[butylamino]carbonyloxy]ethyl acrylate	63225-53-6	1	35	200			Flexibility, adhesion	•		••		•••	
Photomer 4211	2-(2-Ethoxyethoxy) ethyl acrylate (EOEOEA)	7328-17-8	1	6	60	-53	31	Adhesion, solvency, high flexibility	•		•••		••	
Photomer 4808	Octyl decyl acrylate (ODA)	2499-59-4 & 2156-96-6	1	6	60	48	27	Low viscosity, good wetting properties	•		•••	••	••	•
Photomer 4810	Isodecyl acrylate (IDA)	1330-61-6	1	6	100	-60	29	Flexibility, hydrophobic, pigment wetting, substrate wetting	•		•••	••		•
Photomer 4812	Lauryl acrylate (LA)	2156-97-0	1	7	200	-30	30	Flexibility, hydrophobic, good adhesion, low shrinkage, high renewable content	•		•••	••	••	
Photomer 8127	Propoxylated neopentylglycol monomethyl ether acrylate	106143-20-8	1	9			26	Low surface tension, superior substrate wetting, flow and levelling agent	•					•••

## DI-FUNCTIONAL MONOMERS

	CHEMICAL IDENTITY	CAS NO.	FUNCTIONALITY	TYPICAL VISCOSITY   MPA.S AT 25 °C	COLOUR (APHA) MAX	TG [°C]	SURFACE TENSION AT 25°C (M N/M)	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION	PIGMENT WETTING
Photomer 4017*	Hexanediol diacrylate (HDDA)	13048-33-4	2	8	60	41	35	Adhesion, chemical resistance, high solvency & cutting power	•••	•••	•	•••	•••	••
Photomer 4028	Bisphenol-A [4 EO] diacrylate	64401-02-1	2	1000	350	60	46	Gloss, low shrinkage, low skin irritation, litho additive	••			••	••	•••
Photomer 4028 OE	Bisphenol-A [4 EO] diacrylate High purity	64401-02-1	2	1000	70	60	46	High purity, gloss, low shrinkage, low skin irritation, litho additive	••			••	••	•••
Photomer 4050	Polyethyleneglycol 200 diacrylate (PEG200DA)	26570-48-9	2	20	70		40	Flexibility, flow & leveling, water dispersible	•	•	••	••	•	
Photomer 4054	Polyethyleneglycol 400 diacrylate (PEG400DA)	26570-48-9	2	50	100		40	Flexibility, water dispersible, low volatility	•	•	••	••	•	
Photomer 4056	Polyethyleneglycol 600 diacrylate (PEG600DA)	26570-48-9	2	100	100		41	Flexibility, water dispersible, low volatility	•	•	••	••	•	
Photomer 4061*	Tripropyleneglycol diacrylate (TPGDA)	42978-66-5	2	13	50	62	33	Versatile, good flexibility and high reactivity	••	••	•	••	•	•
Photomer 4062	Bisphenol-A [4 EO] diacrylate	64401-02-1	2	1000	250		46	Low odour, low irritancy, hardness, high gloss, chemical and scuff resistance	••	••	••		••	•••
Photomer 4070	Bisphenol-A [3 EO] diacrylate	64401-02-1	2	1700	100	67	46	Low shrinkage, good adhesion, good chemical and heat resistant, good litho performance	••	••	••		••	•••
Photomer 4127	Neopentylglycol [2 PO] diacrylate (NPGPODA)	84170-74-1	2	15	150		32	Pigment wetting, flow & leveling, low shrinkage, low skin irritation	••		••	••	•	••
Photomer 4226*	Dipropyleneglycol diacrylate (DPGDA)	57472-68-1	2	10	40	96	33	Pigment wetting, high reactivity, high solvency & cutting power	••	••	•	••	••	•
Photomer 4361	Hexanediol [2 EO] diacrylate (HD2EODA)	84170-27-4	2	15	250		38	Pigment wetting, flow & leveling, low irritancy	••	••	•	••	•••	••
Photomer 4362	Hexanediol [2 PO] diacrylate (HD2PODA)	84170-73-0	2	15	150		34	Pigment wetting, flow & leveling, low irritancy	••	••	•	••	•••	••

\* Products available as toluene free version



## TRI- AND HIGHER FUNCTIONAL MONOMERS

	CHEMICAL IDENTITY	CAS NO.	FUNCTIONALITY	TYPICAL VISCOSITY   MPA.S AT 25 °C	COLOUR (APHA) MAX	TG (°C)	SURFACE TENSION AT 25°C (M N/M)	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION	PIGMENT WETTING
Photomer 4006*	Trimethylolpropane triacrylate (TMPTA)	15625-89-5	3	90	50	62	37	High reactivity, coating hardness, chemical resistance	•••	•••	•	•••	••	•
Photomer 4072	Trimethylolpropane [3 PO] triacrylate (TMP3POTA)	53879-54-2	3	80	250	-15	33	High reactivity, flexibility, chemical resistance	•••	••	••	•••	••	•••
Photomer 4094*	Glyceryl [4 PO] triacrylate(GPTA)	52408-84-1	3	90		18	35	Pigment wetting, flexibility, impact resistance	•••	••	•	••	•	•••
Photomer 4149*	Trimethylolpropane [3 EO] triacrylate (TMP3EOTA)	28961-43-5	3	63	50		38	High reactivity, coating hardness, tensile strength	•••	••	••	•••	••	•••
Photomer 4157	Trimethylolpropane [9 EO] triacrylate (TMP9EOTA)	28961-43-5	3	105			39	Flexibility, impact resistance, abrasion resistance, water dispersible	••	••	••	•••	••	•••
Photomer 4158	Trimethylolpropane [14 EO] triacrylate (TMP14EOTA)	28961-43-5	3	150			39	Flexibility, impact resistance, abrasion resistance, water dispersible	••	••	••	•••	••	•••
Photomer 4356	Tris [2-Hydroxy Ethyl] Isocyanurate triacrylate (THEICTA)	40220-08-4	3	wax	100	240		High Tg, Good heat resistance	•••	•••			••	
Photomer 4335	Pentaerythritol tri and tetraacrylate	3524-68-3 & 4986-89-4	3,5	650	100	100		High reactivity , low viscosity	•••		•	••	•••	•
Photomer 4172	Pentaerythritol [5 EO] tetraacrylate (PPTTA)	51728-26-8	4	150	100			High reactivity, dispersive properties, flexibility, low solvent content	•••	•••	•	••	••	••
Photomer 4176	Pentaerythritol [5 EO] tetraacrylate (PPTTA)	51728-26-8	4	155	60	36		High reactivity, dispersive properties, flexibility	•••	•••	•	••	••	••
Photomer 4306	Ditrimethylolpropane tetra-acrylate (DiTMPTA)	94108-97-1	4	550	100			High reactivity , low viscosity	•••		•	••	•	••
Photomer 4600	Dipentaerythritol Hexaacrylate (DPPA)	60506-81-2	6	6000	50		42	High reactivity, hardness and scratch resistant	•••	•••	•		••	•••
Photomer 4666	Dipentaerythritol Hexaacrylate (DPHA)	29570-58-9	6	5500	100	94		High reactivity, hardness and scratch resistant	•••	•••	•		••	•••

\* Products available as toluene free version

# EPOXY ACRYLATES

	CHEMICAL IDENTITY	FUNCTIONALITY	TYPICAL VISCOSITY   MPA.S AT T °C	T (°C)	COLOUR (GARDNER) MAX	TENSILE STRENGTH (PSI)	ELONGATION (%)	TG (°C)	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION	PIGMENT WETTING
Photomer 3005	Acrylated epoxy soy oil (ESBOA)	2	20000	25	7	1150	16	8	Flexibility, excellent pigment wetting	•	•	••	••	•	•••
Photomer 3015	Bisphenol A epoxy diacrylate	2	65000	25	2	7500	6	39	Gloss, chemical resistance, coating hardness	••	•••	•	•	•	••
Photomer 3016	Bisphenol A epoxy diacrylate	2	4000	60	2	4150	3	43	Gloss, chemical resistance, coating hardness	••	•••	•	•	•	••
Photomer 3016 LT	Bisphenol A epoxy diacrylate	2	5000	60	1				Chemical resistance, cure speed low irritant, low catalyst	••	•••	•	•	•	••
Photomer 3016-20G	Bisphenol A epoxy diacrylate diluted with 20% GPTA	2	75000	25	1				Gloss, chemical resistance, improved flexibility	•••	•••	•	•	•	••
Photomer 3016-20H	Bisphenol A epoxy diacrylate diluted with 20% HDDA	2	10000	25	2				Gloss, chemical resistance	••	••	•	•	••	••
Photomer 3016-20R	Bisphenol A epoxy diacrylate diluted with 20% TPGDA	2	33000	25	2		2	90	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
Photomer 3016-20T	Bisphenol A epoxy diacrylate diluted with 20% TMPTA	2	50000	25	1			38	Cure speed, chemical resistance, coating hardness	•••	•••	•	•	•	••
Photomer 3016-25R	Bisphenol A epoxy diacrylate diluted with 25% TPGDA	2	12000	25	2	7800	5	45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
Photomer 3016-25T	Bisphenol A epoxy diacrylate diluted with 25% TMPTA	2	45000	25	1				Gloss, chemical resistance, improved flexibility	•••	•••	•	•	••	••
Photomer 3016-30G	Bisphenol A epoxy diacrylate diluted with 30% GPTA	2	23000	25	1				Gloss, chemical resistance, improved flexibility	•••	•••	•	•	•	••
Photomer 3016-30R	Bisphenol A epoxy diacrylate diluted with 30% TPGDA	2	12000	25	1				Gloss, chemical resistance, improved flexibility	••	••	•	•	•	••
Photomer 3016-40R	Bisphenol A epoxy diacrylate diluted with 40% TPGDA	2	2000	25	2			45	Gloss, chemical resistance, improved flexibility	••	••	••	•	•	••
Photomer 3016-40T	Bisphenol A epoxy diacrylate diluted with 40% TMPTA	2	7500	25	2			53	Chemical resistance, cure speed	•••	•••	•	•	••	••
Photomer 3072	Epoxy acrylate oligomer	2	650000	25	3	4270	5	40	Dispersive properties, gloss	••		••	•	•	•••
Photomer 3316	Low Viscosity Modified Epoxy Acrylate	2	30000	25	1		13	45	High reactivity, hardness and solvent resistant	••	••	•••	•	•	•••
Photomer 3317	Amine modified epoxy acrylate	2	200000	25	3				Fast curing, high reactivity, hard, pigment wetter	•••	•••	•	•	•	•••
Photomer 3620	low viscosity, aromatic mono acrylate oligomer	1	200	25	1			4	Fast curing, flexible, low toxicity	•	•	••	•	••	
Photomer 3660	Amine modified epoxy acrylate	2	6000	60	4				Flexibility, chemical resistance	•••	•••	•••	•	•••	

POLYESTER / POLYETHER ACRYLATES

	CHEMICAL IDENTITY	FUNCTIONALITY	TYPICAL VISCOSITY   MPA.S AT T °C	T (°C)	COLOUR (GARDNER) MAX	TENSILE STRENGTH (PSI)	ELONGATION (%)	TG (°C)	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION	PIGMENT WETTING
Photomer 5429	Polyester tetraacrylate	4	400	25	2	1870	10	45	Tensile strength, cure speed, adhesion	••	••	••		•	•••
Photomer 5432	Polyester tetraacrylate	4	3000	60	4	3970	12		Pigment wetting, robust litho performance, tough, abrasion resistance	••	••	••	•	•	•••
Photomer 5434	Polyester tetraacrylate	4	17500	25	4				Good flexibility, good reactivity	••	••	•••			
Photomer 5443	Polyester hexaacrylate	6	32500	25					High Reactivity, Petta & Petia free, good litho performance	•••	•••	••	•	•	•••
Photomer 5450	Fatty acid modified polyester hexaacrylate	6	6000	25	dark		3	42	Fast curing, litho performance, pigmentwetting	•••	••	••	•		•••
Photomer 5435	Modified polyester Acrylate	6	9500	25	2				Good flexibility, pigment wetting	•••	••	••	••		
Photomer 5050	Multi functional acrylate	4	2500	25	2				Fast curing, high functionality, good mechanical resistance	•••	••	••	••		
Photomer 5017	Polyether modified oligomer	2,4	300	25	2				High reactivity, surface hardness, chemical resistance	••	•••	•		••	
Photomer 5021	Polyether modified oligomer	2,6	150	25	2				Low viscosity, high reactivity, surface hardness	••	•••	•		••	
Photomer 5850	Polyether oligomer diacrylate	2,5	90	25	2			20	Low viscosity, high reactivity	•••	••	•••	••	••	••
Photomer 5662	Amine modified polyether acrylate	4	3000	25	1				Adhesion, flexibility, coating hardness	•••	••	•••	••	••	••
Photomer 5930	Amine modified polyether acrylate	4	500	25	2				Pigment wetting, high reactivity, chemical resistance, oxygen inhibitor	•••	••	••	••	••	••
Photomer 5960	Amine modified polyether acrylate	2,5	90	25	1				High reactivity, low viscosity, oxygen inhibitor	•••	••	••	••		•
Photomer 5010	Matting Resin								Self-matting, low gloss						
Photomer 5310	Matting Resin								Self-matting, low gloss, low yellowing						

## URETHANE ACRYLATES

	CHEMICAL IDENTITY	FUNCTIONALITY	TYPICAL VISCOSITY I MPA.S AT T °C	T (°C)	COLOUR (GARDNER) MAX	TENSILE STRENGTH (PSI)	ELONGATION (%)	TG (°C)	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION	PIGMENT WETTING
Photomer 6009	Aliphatic urethane diacrylate	2	30000	25	1				Low viscosity, good weatherability	••	•••	••	•••	••	••
Photomer 6210	Aliphatic urethane diacrylate	2	12000	25	1	1400	40	32	Scratch resistance, flexibility, impact resistance, adhesion	••	••	•••	•••	•••	
Photomer 6230	Aliphatic urethane diacrylate	2	3500	60	1	1100	70	2	Abrasion resistance, impact resistance	••	•••	•••		•••	
Photomer 6629	Aliphatic urethane diacrylate	2	50000	60	2			-40	Good elongation, adhesion, non-yellowing	••	••	•••	•••	••	
Photomer 6891	Aliphatic urethane diacrylate	2	8000	25	1	2000	60	28	Flexibility, impact resistance, non-yellowing	••	••	•••	•••	•••	
Photomer 6893-20R	Aliphatic urethane diacrylate	2	2750	60	1	2700	40	41	Ease of handling, flexibility, non-yellowing	••	••	••	•••	••	
Photomer 6008	Aliphatic urethane triacrylate	3	16000	60	1	6800	8	47	Coating hardness, tensile strength, chemical resistance	••	•••	•	•	•	
Photomer 6010	Aliphatic urethane triacrylate	3	5800	60	1	2100	45	38	Low viscosity, good weatherability	••	••	••	••	•	••
Photomer 6019	Aliphatic urethane triacrylate	3	3250	60	1	8200	8	51	Coating hardness, tensile strength, non-yellowing, adhesion	••	•••	•	•••	••	
Photomer 6184	Aliphatic urethane triacrylate	3	58000	25	1	5400	7	53	Ease of handling, coating hardness, tensile strength, temperature resistant	••	•••	••		•	
Photomer 6630	Aliphatic urethane triacrylate	3	65000	25	2		29	-27	Good toughness and flexibility	••	••	••	••	•	
Photomer 6892	Aliphatic urethane triacrylate	3	29500	25	1	1300	45	14	Adhesion, chemical resistance, flexibility, scratch resistance	••	•	•••	••	•••	
Photomer 6625	Aliphatic Urethane hexaacrylate	6	65000	25	1			104	Cure speed, adhesion, scratch and chemical resistance	•••	••	••	•••	•••	
Photomer 6690	Aliphatic Urethane hexaacrylate	6	100000	25	1				Fast cure, high hardness, chemical resistance and weather resistance	•••	•••	•	•••	•	
Photomer 6576	Aromatic Urethane diacrylate	2	300000	25	2			-24	Good toughness and flexibility	••		•••	••	•	
Photomer 6720	Aromatic Urethane hexaacrylate	6	28500	25	2			49	Fast cure, impact strength, hardness, abrasion	•••	••	•	•	•	



## ADHESION PROMOTERS

	CHEMICAL IDENTITY	FUNCTIONALITY	TYPICAL VISCOSITY I MPA.S AT T °C	COLOUR (GARDNER) MAX	ACID VALUE (MG KOH/G) MAX	TG [°C]	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION	PIGMENT WETTING
Photomer 4046	Acid functional acrylate	1	5750		225		Adhesion, hydrophobic	•		••	•	•••	
Photomer 4173	Acid functional acrylate		4000	1	210		Adhesion, coating hardness, chemical resistance	•	•••			•••	
Photomer 4703	Acid functional acrylate	1	190	2	290		Adhesion, low viscosity, chemical resistance	•				•••	
Photomer 4846	Polyester resin Solution in HDDA	2	750	1			Adhesion, high MW resin compatibilizer, flexibility	•		••		•••	•
Photomer 5028	Chlorinated polyester 40 % of GPTA	3	95000	3	25	53	Adhesion promotor	••		••	•	•••	••
Photomer 5041	Chlorinated polyester 40 % of TMPTA	3	95000	5	25	53	Adhesion promotor	••		••	•	•••	••
Photomer 9501	Acrylic resin diluted in HDDA		14750	1	8	74	Adhesion, increased tack	•	••	••		•••	•
Photomer 2203	Acid functional methacrylate	2	1250	3	320		Adhesion to especially metal and glass	•	•	•••		•••	

## METHACRYLATES

	CHEMICAL IDENTITY	CAS NO	FUNCTIONALITY	TYPICAL VISCOSITY   MPa.S AT 25 °C	COLOUR (APHA) MAX	ACID VALUE (MG KOH/G) MAX	TG (°C)	SURFACE TENSION AT 25°C (M N/M)	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	ADHESION
Photomer 2001	Triethylene glycol dimethacrylate (TEGDMA)	109-16-0	2	8	100	0,5		35	Good heat and chemical resistance, good flexibility	•	••	••	••
Photomer 2002	Diethelene glycol dimethacrylate (DEGDMA)	2358-84-1	2	8	60	0,5	66	34	Low viscosity, good adhesion	•	••	••	••
Photomer 2006	Trimethylolpropane trimethacrylate (TMPTMA)	3290-92-4	3	43	70	0,1	27	32	Chemical and impact resistance, hardness	•••	••	•	•••
Photomer 2012	Isobornyl methacrylate (IBOMA)	7534-94-3	1	6	50	0,5		29	Adhesion, flexibility, high Tg, hardness	•	•	••	•••
Photomer 2050	Polyethyleneglycol 200 di- methacrylate (PEG200DMA)	25852-47-5	2	14	60	0,5		35	Heat resistance, chemical resistance, low skin irritation, flexibility	•	•	••	•
Photomer 2203	Acid functional methacrylate		2	1250		320			Adhesion to especially metal and glass	•	•	•••	•••
Photomer 2444	Bisphenol-A [2 EO] di-methacrylate	24448-20-2	2	1100	100	0,1		39	High refractive index, chemical and water resistance	••	••	••	•
Photomer 2812	Lauryl Methacrylate (LMA)	142-90-5	1	6	100	0,1	-65	29	Low shrinkage, good flexibility, hydrophobic, good weather resistance	•	••	••	••

AMINE ACRYLATES		FUNCTIONALITY	TYPICAL VISCOSITY   MPA.S AT 25 °C	COLOUR (GARDNER) MAX	PRODUCT ATTRIBUTES	REACTIVITY	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION	PIGMENT WETTING
	CHEMICAL IDENTITY									
Photomer 4250	Acrylated amine synergist		350	6	Cure speed, high reactivity, oxygen inhibitor	•••	•		••	•
Photomer 4771	Acrylated amine synergist	2	700	3	Cure speed, non-yellowing, low viscosity	•••	•		•••	•
Photomer 4775	Acrylated amine synergist	2	3200		Cure speed, non-yellowing, low viscosity	•••	•		•••	•
Photomer 4967	Acrylated amine synergist	1	23	3	Cure speed, high reactivity, chemical resistance, oxygen inhibitor	•••	•	•	•	
Photomer 5006	Acrylated amine synergist	1	73	2	Cure speed, high reactivity, chemical resistance, oxygen inhibitor	•••	•	•		

## CATIONIC PHOTOINITIATORS

	CHEMICAL IDENTITY	CAS NO.	MELTING POINT   °C	UV-ABSORPTION [NM] LAMBDA MAX	THROUGH CURE	SURFACE CURE	CLEAR SYSTEMS	WHITE SYSTEMS	PIGMENTED SYSTEMS	LED CURE
Omnicat 320	mixed triarylsulphonium hexaantimonate salts in 50% propylene carbonate	159120-95-3 & 108-32-7	Liquid at roomtemp	245,312	••	••	••	•••		
Omnicat 430	Mixed triarylsulfonium hexafluorophosphate salts	68156-13-8 & 74227-35-3	98 - 104	296	••	••		••	•••	
Omnicat 432	Mixed triarylsulfonium hexafluorophosphate salts (45%) in propylene carbonate (55%)	104558-95-4	Liquid at roomtemp	210, 300	••	••	•••	•••	•••	
Omnicat 440	4,4'-dimethyl-diphenyl iodonium hexafluorophosphate	60565-88-0	175 - 180	267	••	••	•	••	•••	
Omnicat 445	Mixture of Omnicat 440 (50%) in Oxetane (50%)	60565-88-0 & 3047-32-3	Liquid at roomtemp	240	••	••	•	••	•••	
Omnicat 550	10-biphenyl-4-yl-2-isopropyl-9-oxo-9H-thioxanthen-10-ium hexafluorophosphate	591773-92-1	202 - 210	285	••	••	•	•	•••	•
Omnicat 650	Reaction product of polyol and 10-(2-carboxymethoxy)-biphenyl-4-yl-2-isopropyl-9-oxo-9H-thioxanthen-10-ium hexafluorophosphate		70 - 80	250	••	••	•	••	•••	
Omnicat BL 550	Blend of Omnicat 550 (20%) in propylene carbonate (25%) and Omnilane OC 2005 (55%)	591773-92-1 & 108-32-7 & 2386-87-0	Liquid at roomtemp	220, 285	••	••	•	•	•••	•





## CATIONIC OLIGOMERS

	CHEMICAL IDENTITY	CAS NO.	TYPICAL VISCOSITY I MPA.S AT T °C	T (°C)	COLOUR (APHA) MAX	PRODUCT ATTRIBUTES	REACTIVITY	HARDNESS	FLEXIBILITY	YELLOWING RESISTANCE	ADHESION
Omnilane OC1005	(3-4-Epoxy cyclohexane) methyl 3'-4'-Epoxy cyclohexyl-Carboxylate	2386-87-0	400	25	100	Fast cure, heat resistant, adhesion	•••	•••	•	•••	•••
Omnilane OC2005	(3-4-Epoxy cyclohexane) methyl 3'-4'-Epoxy cyclohexyl-Carboxylate	2386-87-0	335	25	50	Fast cure, heat resistant, adhesion	•••	•••	•	•••	•••
Omnilane OC3005	Bis(7-oxabicyclo[4.1.0]hept-3-ylmethyl) adipate	3130-19-6	575	25	250	Fast cure, higher flexibility, adhesion	•••	•••	••	•••	•••

ADDITIVES

		CHEMICAL IDENTITY	CAS NO.	MELTING POINT   °C	APPEARANCE	PRODUCT ATTRIBUTES
Inhibitor	Omnistab IC	Proprietary liquid blend of inhibitors and stabilisers	confidential	Liquid at roomtemperature	Amber liquid	Non yellowing polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab IN 515	Liquid blend of Tris(N-hydroxy-N-nitrosophenyl-aminato-0,0'alumium & 2-Phenoxy ethyl acrylate.	15305-07-4 & 48145-04-6	Liquid at roomtemperature	Medium to dark brown liquid	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab IN 516	Liquid blend of Tris(N-hydroxy-N-nitrosophenyl-aminato-0,0'alumium & 2-Phenoxy ethyl acrylate.	15305-07-4 & 48145-04-6	Liquid at roomtemperature	Medium to dark brown liquid	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab IN 518	Liquid blend of Tris(N-hydroxy-N-nitrosophenyl-aminato-0,0'alumium & Propoxylated glycerol triacrylate	15305-07-4 & 52408-84-1	Liquid at roomtemperature	Medium to dark brown liquid	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab IN 520	Liquid blend of Tris(N-hydroxy-N-nitrosophenyl-aminato-0,0'alumium & Di-Trimethylolpropane Tetraacrylate	15305-07-4 & 94108-97-1	Liquid at roomtemperature	Medium to dark brown liquid	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab IN 521	Liquid blend of Tris(N-hydroxy-N-nitrosophenyl-aminato-0,0'alumium & Di-Trimethylolpropane Tetraacrylate	15305-07-4 & 84170-74-1	Liquid at roomtemperature	Medium to dark brown liquid	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab IN 522	Liquid blend of Tris(N-hydroxy-N-nitrosophenylaminato-0,0'alumium & ethoxylated trimethylol propane triacrylate	15305-07-4 & 28961-43-5	Liquid at roomtemperature	Medium to dark brown liquid	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab IN 526	Liquid blend of tris (n-hydroxy-N-nitrophenyl-aminato-0,0') aluminium, epoxy acrylate oligomer & propoxylated glycerol triacrylate	15305-07-4 & 55818-57-0 & 52408-84-1	Liquid at roomtemperature	Dark brown liquid	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab BHT	2,6-di-tert-butyl-p-cresol	128-37-0	71°C	White to off white powder	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
Wetting, Flow, Slip Additive	Omnivad RS 230	Acrylated Silicone surfactant		Liquid at roomtemperature	Slightly hazy amber liquid	Reactive, crosslinkable surface active levelling agent. Improves slip and flow.
	Omnivad 1116	Silicone glycol co-polymer surfactant		Liquid at roomtemperature	Cloudy light yellow to amber liquid	Non reactive, surface active levelling agent. Improves slip and flow.
Defoamer	Omnivad Foam Zap EZ	Proprietary surfactant blend		Liquid at roomtemperature	Light yellow off-white liquid	Prevention and/or elimination of foam
Rheology modifier	Omnivad Mirroflex SB 50%	50% Sucrose Benzoate solution		Liquid at roomtemperature	Slight amber to clear liquid	Rheology modifier/ hold out additive. Flexibility, good hardness, no loss of gloss

## ADDITIVES

		CHEMICAL IDENTITY	CAS NO.	MELTING POINT   °C	APPEARANCE	PRODUCT ATTRIBUTES
<b>Rheology modifier</b>	Omnivad Mirroflex SB 70%	70% Sucrose Benzoate solution		Liquid at room temperature	Slight amber to clear liquid	Rheology modifier/ hold out additive. Flexibility, good hardness, no loss of gloss
	Omnivad SB Flakes	Sucrose Benzoate	12738-64-6	93 -100°C	Light yellow to pale white crystalline	Rheology modifier / hold-out additive, improves colour strength
<b>Wax</b>	Omniwax 110	25% oxidized PE wax emulsion in TPGDA		Liquid at room temperature	Emulsion	Provides slip and transit abrasion whilst maintaining gloss and clarity
	Omniwax 330	35% PE/PTFE dispersion in TPGDA		Liquid at room temperature	Emulsion	Provides slip and transit abrasion whilst maintaining gloss and clarity
	Omniwax 520	40% PTFE in TPGDA		Liquid at room temperature	Emulsion	Provides slip and transit abrasion whilst maintaining gloss and clarity
<b>Matting Agent</b>	Omniwax Mat 810	50% polyethylenesilica dispersion in TPGDA		97 °C	Emulsion	An efficient matting agent for thin films. In addition, it provides slip and mar resistance, as well as resistance to burnishing
<b>UV Light Absorber</b>	Omnistab 123	Liquid mixture of amino ether, hindered amine light stabilisers	129757-67-1	Liquid at room temperature	Pale yellow liquid	Liquid HALS. Inhibits oxidation reactions and helps to prevent yellowing, loss of gloss, cracking and chalking especially at coating surface. Most effective when used in combination with a UVA.
	Omnistab 320	2-benzotriazol-2-yl-4,6-di-tert butylphenol	3846-71-7	> 154 °C	Light yellow powder	Benzotriazole UVA. Prevents reaction of UV light sensitive groups in coating. Helps to prevent colour change, blistering and delamination. Protects throughout coating depth. Most effective when used in combination with a HALS.
	Omnistab 326	2-[5-Chloro(2H)- Benzotriazole-2-Yl]-4-(Methyl)-6-(Tert-Butyl)Phenol	3896-11-5	> 138 °C	White to pale yellow powder	Benzotriazole UVA. Prevents reaction of UV light sensitive groups in coating. Helps to prevent colour change, blistering and delamination. Protects throughout coating depth. Most effective when used in combination with a HALS.
	Omnistab 328	2-[2H-Benzotriazol-2-yl]-4,6-ditertpentylphenol	25973-55-1	> 78 °C	Yellowish Powder	Benzotriazole UVA. Prevents reaction of UV light sensitive groups in coating. Helps to prevent colour change, blistering and delamination. Protects throughout coating depth. Most effective when used in combination with a HALS.

ADDITIVES						
		CHEMICAL IDENTITY	CAS NO.	MELTING POINT   °C	APPEARANCE	PRODUCT ATTRIBUTES
UV Light Absorber	Omnistab 1130	Liquid mixture of benzotriazole type UV Absorbers	104810-48-2 & 104810-47-1 & 25322-68-3	Liquid at room temperature	Light amber viscous liquid	Benzotriazole UVA. Prevents reaction of UV light liquid groups in coating. Helps to prevent colour change, blistering and delamination. Protects throughout coating depth. Most effective when used in combination with a HALS.
	Omnistab BP-1	2,4 Dihydroxybenzophenone	131-56-6	143 - 146°C	Yellow crystalline powder	Benzotriazole UVA. Prevents reaction of UV light sensitive groups in coating. Helps to prevent colour change, blistering and delamination. Protects throughout coating depth. Most effective when used in combination with a HALS.
	Omnistab BP-12	2-Hydroxy-4-n-octyloxy benzophenone	1843-05-6	47 - 49 °C	Pale yellow liquid	Benzotriazole UVA. Prevents reaction of UV light sensitive groups in coating. Helps to prevent colour change, blistering and delamination. Protects throughout coating depth. Most effective when used in combination with a HALS.
	Omnistab BP-3	2-Hydroxy-4-Methoxybenzophenone	131-57-7	62 - 65°C	Yellowish to Greenish Crystalline powder	Benzotriazole UVA. Prevents reaction of UV light sensitive groups in coating. Helps to prevent colour change, blistering and delamination. Protects throughout coating depth. Most effective when used in combination with a HALS.
	Omnistab BZT	1H-Benzotriazole	95-14-7	97 - 99 °C	White to light yellow granulate	Polymerisation Inhibitor and in can stabiliser for increased shelf life of UV/EB formulations
	Omnistab UV-1	Ethyl 4-[[E]-[[methyl(phenyl) amino]methylene]amino]benzoate	57834-33-0	Liquid at room temperature	Pale yellow liquid	UVA especially suitable for polyurethane products
Hindered Amine Light Stabiliser	Omnistab LS 234	2-[2H-benzotriazol-2-yl]-4,6-bis(1-methyl-1-phenylethyl)phenol	70321-86-7	139,5 - 141°C	Light yellow powder	HALS. Inhibits oxidation reactions and helps to prevent yellowing, loss of gloss, cracking and chalking especially at coating surface. Most effective when used in combination with a UVA.
	Omnistab LS 292	Mixture of Bis(1,2,2,6,6-pentamethylpiperidin-4-yl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	41556-26-7 & 82919-37-7	Liquid at room temperature	Pale yellow liquid	Liquid HALS. Inhibits oxidation reactions and helps to prevent yellowing, loss of gloss, cracking and chalking especially at coating surface. Most effective when used in combination with a UVA.
	Omnistab LS 622	Butanedioic acid, dimethylesters, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidine ethanol	65447-77-0	50 - 70 °C	Light yellow powder	HALS. Inhibits oxidation reactions and helps to prevent yellowing, loss of gloss, cracking and chalking especially at coating surface. Most effective when used in combination with a UVA.

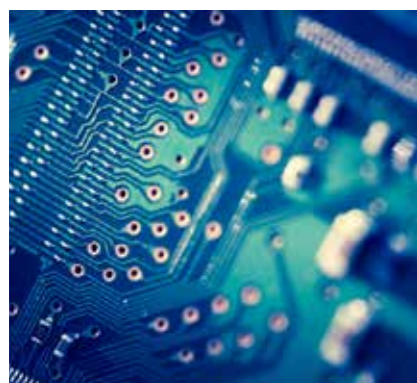
ADDITIVES						
		CHEMICAL IDENTITY	CAS NO.	MELTING POINT   °C	APPEARANCE	PRODUCT ATTRIBUTES
<b>Hindered Amine Light Stabiliser</b>	Omnistab LS 944	Poly-((6-((1,1,3,3-tetramethylbutyl)amino)-1,3,5-triazine-2,4-diyl)-([2,2,6,6-tetramethylpiperdiny]imino)-hexane-1,6-diyl-([2,2,6,6-tetramethylpiperidiny]imino))	71878-19-8	> 100 °C	White to light yellow granular powder	HALS. Inhibits oxidation reactions and helps to prevent yellowing, loss of gloss, cracking and chalking especially at coating surface. Most effective when used in combination with a UVA.
<b>Optical Brightener</b>	Omnistab OB	2,5 thiophenediylbis (5-tert-butyl-1,3 benzoxazole)	7128-64-5	200 - 205 °C	Pale to yellow crystalline powder	Optical Brightener / Fluorescent whitening agent. Stable at high temperatures and suitable for use in inks and coatings.
	Omnistab OB-1	4,4'-bis(benzoxazol-2yl) stilbene	1533-45-5	> 300 °C	Light yellow powder	Optical brightener for polymer processing
SPECIALTIES AND OTHERS						
<b>Vinyl Monomer</b>	Omnimer ACMO	Acryloymorpholine	4-12-5117	Liquid at room temperature	Colourless or pale yellow clear liquid	Provides as a co-monomer flexibility, low shrinkage and heat resistance
<b>Vinyl Monomer</b>	Omnimer NVP	1-vinyl-2-pyrrolidone (NVP)	88-12-0	Liquid at room temperature	Clear liquid	Provides as a co-monomer flexibility, low shrinkage, adhesion and cure speed
<b>Vinyl Monomer</b>	Omnimer VCL	1-Vinylhexahydro-2H-azepin-2-one (NVC)	2235-00-9	32 - 36 °C	Light yellow crystalline solid	Provides as a co-monomer flexibility, low shrinkage, adhesion, pigmentwetting and hydrophobicity
<b>Thiol</b>	Omnimer PE-1	Pentaerythritoltetrakis (3-mercaptopbutylate)	31775-89-0	Liquid at room temperature	Colourless to yellow clear liquid	Provides as a co-resin oxygen inhibition to improved cure performance

# APPLICATION SOLUTIONS



GRAPHIC ARTS	TYPE	KEY FEATURES	OLIGOMERS	MONOMERS
	Over Print Varnishes	Non yellowing, levelling & slip control	Photomer 3016-20H; 3016-20D; 3016-25R; 5429; 5435; 5662; 5930; 5960; 5010; 5310; 6720	Photomer 4006; 4017; 4061; 4226; 4094; 4149; 4666
	Offset Printing Inks	Ink water balance, pigment wetting	Photomer 3005, 3016-25T; 3016-30G; 3316; 5432, 5028; 5041; 5443	Photomer 4006; 4028, 4072; 4094; 4149; 4172; 4176; 4306; 4666
	Flexo Printing Inks	Pigment wetting, flow	Photomer 3005; 3016-20H; 3016-20D; 3016-25R; 3316; 5429; 5432; 5435; 5450; 6720	Photomer 4006; 4017; 4061; 4127, 4226; 4094; 4149; 4306; 4666
	Inkjet	Low viscosity	Photomer 5429; 5435; 5450 Omnimer ACMO, NVP, VCL	Photomer 4012; 4035; 4039; 4141; 4142; 4184; 4211; 4808; 4810; 4812; 4017, 4061; 4127
	Screen	Weather resistance, low shrinkage & adhesion	Photomer 5429; 5432; 5450; 6629; 6720; 6893-20R Omnimer ACMO, NVP, VCL	Photomer 4012; 4035; 4039; 4050; 4054; 4141; 4142; 4184; 4211; 4808; 4017, 4061; 4127; 4226
	Food Packaging	Low migration, low odour & high Mw	Photomer 3005; 5429; 5432; 5050; 5930; 5960; 5662	Photomer 4094; 4149; 4172; 4306
WOOD COATINGS	Top coat	Abrasion & scratch resistance	Photomer 3016 series; 5429; 5432; 6210; 6008	Photomer 4017; 4006; 4061; 4226; 4149
	Base/Mid coat	Adhesion & flexibility	Photomer 6891; 6893-20R	Photomer 4017; 4006; 4061; 4226; 4149
	Primer	Sandability, adhesion & cure	Photomer 5662; 4703; 3005	Photomer 4017; 4006; 4061; 4226; 4149
3D PRINTING		Low shrinkage, flexibility	Photomer 6019; 6210, Omnilane OC 1005	Photomer 4012; 8127, Omnimer ACMO
METAL COATINGS		Adhesion	Ph3016-25R ; 5429; 6008; 6210; 4173; 2203	Photomer 4028; 4127; 4149

# APPLICATION SOLUTIONS



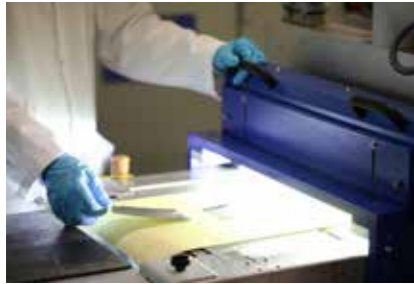
PLASTIC COATINGS	TYPE	KEY FEATURES	OLIGOMERS	MONOMERS
	PVC Flooring	Adhesion, flexibility, abrasion and chemical resistance, weatherability	Photomer 6008; 6010; 5429; 6210; 6025	Photomer 4017; 4127; 4006; 4810; 4149; 4061; 4226
	Rigid	Adhesion, flexibility, abrasion, chemical resistance, weatherability	Photomer 6230; 6892; 6891; 6019; 6008; 3005; 3016LT; 5432; 3660; 4046	Photomer 4046; 4141; 4142; 4127; 4810; 4094
MEDICAL DEVICES / DENTAL		Adhesion & low shrinkage	Photomer 2444; 6210; 6010	Photomer 2001; 2002; 2006;
ELECTRONICS	Solder Mask/Etch Resist/PCB	Heat resistance	Photomer 6625; 6892; 6230	
	Optical Fiber	Low shrinkage & adhesion	Photomer 6625; 6892; 6230	Photomer 4070; 4035; 4135
ADHESIVES	Pressure sensitive adhesive	Adhesion, flexibility & weather resistance	Photomer 6230	Photomer 4012; 4003; 4141; 4142; 4173
	Lamination adhesives	Adhesion, flexibility & weather resistance	Photomer 6010; 6210; 3016	Photomer 4006; 4017; 4149; 4127
	Anaerobic adhesives	Adhesion & heat resistance		Photomer 2006; 2012
	Fingernails	Mechanical resistance & adhesion	Photomer 6008; 6010; 6019; 6210	Photomer 2001; 2002; 2006; 2012; 4012



## Technical support

IGM Resins is a fully integrated global supplier of UV / EB curable 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.

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.



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 coatings formulation 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 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.

## Contact information

### EUROPE

#### **IGM Resins B.V.**

Gompenstraat 49  
5145 RM Waalwijk  
The Netherlands

T: +31 (0) 416 286073  
F: +31 (0) 416 564632

#### **IGM Resins Ltd.**

Hexagon Tower  
Blackley  
Manchester  
M9 86Q  
United Kingdom

T: +44 (0) 161 7211410  
F: +44 (0) 845 4580639

#### **IGM Holding B.V. Iberica**

Calle Bruc, 91, 3a  
08009 Barcelona  
Spain

T: +34 (0) 934 765631  
F: +34 (0) 933 961837

#### **IGM Resins France [Laboratory]**

13-15, impasse Alexis Trinquet  
91000 Evry  
France

### AMERICAS

#### **IGM Resins USA Inc. [Sales office]**

3705 Stern Avenue  
St. Charles, IL 60174  
United States of America

T: +1 (0) 630 2131616  
F: +1 (0) 630 5249096

#### **IGM Resins USA Inc. [Manufacturing location]**

3300 Westinghouse Blvd  
Charlotte, NC 28273  
United States of America

T: +1 (0) 630 2131616  
F: +1 (0) 630 5249096

#### **Quiminutri Comercio de Especialidades Quimicas S.A.**

Marginal Rodovia Miguel  
Melhado Campos  
5215 Distrito Industrial Vinhedo  
Brasil

T: +55 19 3578 9010  
F: +55 19 3578 9011

### ASIA-PACIFIC

#### **IGM Resins International Trading Shanghai Co., Ltd.**

B1801, Tomson Center  
No. 188 Zhangyang Road  
Pudong District, Shanghai  
200122 P.R. China

T: +86 (0) 215 2080993  
F: +86 (0) 215 2080930

#### **IGM Resins International Trading Taiwan Ltd.**

15F. - 3, No. 88 Zhongshan Road  
Zhongli City, Taoyuan  
County 320  
Taiwan

T: +886 (0) 342 75275  
F: +886 (0) 342 75279

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

[www.igmresins.com](http://www.igmresins.com)