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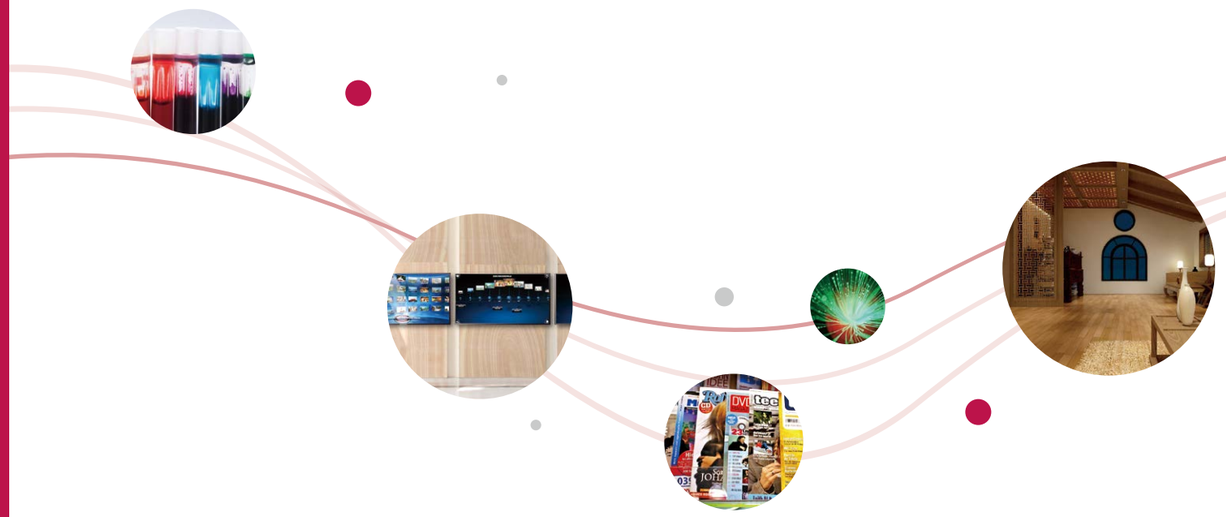

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MIWON

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Revised in Feb., 2023

CONTENTS

OLIGOMERS

05 Urethane Acrylate Oligomer
- Aliphatic Urethane Acrylate
- Aromatic Urethane Acrylate
- Urethane Methacrylate
- Organotin-free Urethane Acrylate

09 Epoxy Acrylate Oligomers
- Bisphenol A type
- Novolac type
- Modified type

11 Polyester Acrylate Oligomer

Water Borne Acrylate Oligomer

13 Specialty Acrylate Oligomer
- Water Soluble Acrylate Oligomer
- High R.I. Acrylate Oligomer
- Silicone Acrylate Oligomer
- Caprolactone Acrylate Oligomer
- Melamine Acrylate Oligomer
- Butadiene Acrylate Oligomer
- Dendritic Acrylate Oligomer

15 Other Specialties
- Acrylic Acrylate
- Adhesion Promoter
- Oligo Amine Acrylate
- Amine Synergist
- Sucrose Benzoate
- Powder Coating Additive

MONOMERS

17 Acrylate Monomers

25 Methacrylate Monomers

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Sustainable Partner
Reliable Supplier

1959 ~ 1999

2000 ~ 2022

1959 Miwon Commercial Co., Ltd.
1983 Photo-initiator Production in Banwol Plant
1989 Monomer Production in Banwol Plant
1995 Jeonju Plant (moved Monomer Production)
1999 ISO 9002:1994 Certification

2000 Oligomer Production in Jeonju Plant
R&D Center in Banwol Plant
2002 ISO 9001:2000 Certification
2007 Miwon North America Inc. (USA)
2009 Miwon Specialty Chemical Co., Ltd.
ISO 9001:2008 Certification

2011 Miwon Europe GmbH (Germany)
2012 Chungju Plant
2014 Miwon Austria F&E GmbH (Austria)
Miwon Spain S.L.U. (Spain)
2015 Miwon Chicago Laboratory (USA)
Miwon Shenzhen Chemical Co., Ltd. (China)
2016 Miwon Guangzhou Laboratory (China)
2017 Miwon Gwanggyo Center (HQ and R&D, Korea)

2018 Miwon Specialty Chemical USA, Inc. (USA)
Miwon Guangzhou Chemical Co., Ltd. (China)
Miwon Nantong Chemical Co., Ltd. (China)
ISO 9001:2015 Certification
2019 Miwon Specialty Chemical Pvt., Ltd. (India)
2021 ISO 14001:2015 Certification
2022 'Silver' in EcoVadis Sustainability Rating

OLIGOMERS

Urethane Acrylate Oligomer

General Description					Chemical Properties				Physical Properties				
Product Name	Description	Dilution (%)	Key Features	Functionality	Color (APHA)	Viscosity (cps @ 25℃)	M_w (GPC)	Refractive Index (nD^{25})	Pencil Hardness (30 μm)	Pendulum hardness (30 μm)	Tensile Strength (psi)	Elongation (%)	Reactivity (mJ/cm^2)
ALIPHATIC URETHANE ACRYLATES													
MIRAMER PU210	Aliphatic difunctional acrylate	HDDA 12	Excellent abrasion resistance, Good flexibility, Good elasticity, Low yellowing	2	100 Max.	65,000	2,600	1.487	B	85	5,090	55	160
MIRAMER PU212	Aliphatic difunctional acrylate	CTFA 25	Good flexibility, Good impact strength	2	100 Max.	4,300 (60℃)	3,000	1.490	5B	132	3,110	50	80
MIRAMER PU256	Aliphatic difunctional acrylate	HDDA 5	High elongation, Good flexibility	2	100 Max.	64,000	3,450	1.477	6B	36	1,440	111	120
MIRAMER PU2100	Aliphatic difunctional acrylate		Low yellowing, High elongation, Good abrasion resistance, Good flexibility	2	100 Max.	7,000	1,400	1.483	< 6B	20	1,490	74	160
MIRAMER PU2200	Aliphatic difunctional acrylate		Low yellowing, High elongation, Excellent abrasion resistance, Good flexibility	2	100 Max.	12,000	2,000	1.488	< 6B	27	1,740	71	160
MIRAMER PU2510	Aliphatic difunctional acrylate		High reactivity, High elongation, Excellent abrasion resistance, Good flexiblility, Good scratch resistance, Low yellowing	2	100 Max.	23,000 (60℃)	4,900	1.490	< 6B	41	3,020	79	40
MIRAMER PU2552	Aliphatic difunctional acrylate	PHEA 50 - 55	Good flexibility, Good bond streghth, Good adhesion	2	100 Max.	100 - 400	2,800	1.497	< 6B	14	N/A	N/A	40
MIRAMER PU2560	Aliphatic difunctional acrylate		Excellent flexibility, Low yellowing	2	50 Max.	3,000 (60℃)	11,000	1.463	< 6B	39	N/A	N/A	> 300
MIRAMER PU2030I	Aliphatic difunctional acrylate	IBOA 20	High elongation, Good flexibility, Low yellowing	2	200 Max.	8,000 (60℃)	12,000	1.476	< 6B	10	840	235	280
MIRAMER PU320	Aliphatic trifunctional acrylate	HDDA 15	Excellent abrasion resistance, Good elasticity, Low yellowing	3	100 Max.	50,000	7,850	1.478	2B	126	3,070	56	80
MIRAMER PU340	Aliphatic trifunctional acrylate		High reactivity, Good elasticity, Low yellowing	3	100 Max.	70,000	2,400	1.494	3B	101	4,390	19	40
MIRAMER PU3200	Aliphatic trifunctional acrylate	TMPTA 50	High pendulum hardness, Excellent abrasion resistance, Low yellowing	3	100 Max.	2,800 (60℃)	1,900	1.491	2H	173	N/A	N/A	80
MIRAMER PU3210	Aliphatic trifunctional acrylate	TMPTA 50	High reactivity, Good abrasion resistance (falling sand), Low yellowing	3	100 Max.	8,000 (60℃)	4,000	1.494	H	160	N/A	N/A	40
MIRAMER PU3450	Aliphatic trifunctional acrylate		Soft feel property, Excellent flexibility, Low yellowing	3	100 Max.	1,600 (60℃)	7,000	1.484	< 6B	102	N/A	N/A	80
MIRAMER PU3900	Aliphatic difunctional acrylate	PHEA 25	Good flexibility, Good adhesion	2	200 Max.	3,000 (60℃)	7,280	1.499	5B	18	730	152	80
MIRAMER PU3280D20	Aliphatic trifunctional acrylate	DPGDA 20 TPGDA 14	Excellent abrasion resistance, Good toughness	3	50 Max.	50,000	7,700	1.481	F	153	6,490	10	80
MIRAMER PU5000	Aliphatic hexafunctional acrylate		High reactivity, High hardness, Excellent scratch resistance, Dual cure	6	100 Max.	2,000	1,800	1.477	3H	153	N/A	N/A	40
MIRAMER PU610	Aliphatic hexafunctional acrylate		High reactivity, High hardness, Excellent chemical resistance	6	100 Max.	100,000	1,500	1.495	4H	220	N/A	N/A	40
MIRAMER PU6510	Aliphatic hexafunctional acrylate		High reactivity, Excellent abrasion resistance, Good scratch resistance	6	200 Max.	10,000	3,200	1.489	F	136	3,930	3	40
MIRAMER UA5216	Aliphatic difunctional acrylate	IBOA 60	High elongation, Excellent adhesion, Good flexibility, Low yellowing	2	200 Max.	20,000	30,000	1.477	< 6B	28	770	127	160
MIRAMER MU9500	Aliphatic multifunctional acrylate		High reactivity, High hardness, Excellent chemical resistance	10	100 Max.	1,300 (60℃)	1,750	1.492	4H	207	N/A	N/A	40
MIRAMER MU9800	Aliphatic multifunctional acrylate		High hardness, Good scratch resistance, Low shrinkage at low film weights	9	100 Max.	45,000	3,500	1.496	4H	218	N/A	N/A	40
MIRAMER SC2100	Aliphatic multifunctional acrylate		High reactivity, High hardness, Excellent scratch resistance, Good abrasion resistance	9	100 Max.	80,000	5,500	1.497	3H	213	N/A	N/A	40
MIRAMER SC2152	Aliphatic multifunctional acrylate		High hardness, High reactivity, Excellent chemical resistance and scratch resistance	15	100 Max.	6,300 (60℃)	5,000	1.496	4H	209	N/A	N/A	40
MIRAMER SC2404	Aliphatic difunctional acrylate	IBOA 15	High elongation, Good flexibility, Low shrinkage, Low yellowing	2	100 Max.	55,000	5,200	1.480	< 6B	30	2,700	157	80
MIRAMER SC2565	Aliphatic difunctional acrylate		High elongation, Good flexibility, Low yellowing	2	100 Max.	5,600 (60℃)	5,200	1.482	< 6B	27	1,120	99	80

OLIGOMERS

Urethane Acrylate Oligomer

General Description					Chemical Properties				Physical Properties				
Product Name	**Description**	**Dilution (%)**	**Key Features**	**Functionality**	**Color (APHA)**	**Viscosity (cps @ 25℃)**	**M_w (GPC)**	**Refractive Index (nD^{25})**	**Pencil Hardness (30 μm)**	**Pendulum hardness (30 μm)**	**Tensile Strength (psi)**	**Elongation (%)**	**Reactivity (mJ/cm^2)**
AROMATIC URETHANE ACRYLATES													
MIRAMER PU370	Aromatic trifunctional acrylate	TMPTA 30	Excellent toughness, Good abrasion resistance	3	100 Max.	70,000	8,000	1.499	HB	127	6,150	12	80
MIRAMER MU3603	Aromatic difunctional acrylate		High elongation, Good flexibility	2	100 Max.	4,000 (60℃)	3,300	1.496	< 6B	21	820	101	80
MIRAMER PU2900	Aromatic difunctional acrylate	Acrylated monomer 30 - 40	High reactivity, High gloss, Excellent toughness	2	200 Max.	50,000	1,440	1.555	2B	165	5,300	8	40
MIRAMER PU3600E	Aromatic trifunctional acrylate	$TMP(EO)_3TA$ 40	High reactivity, Excellent toughness, Good abrasion resistance (falling sand)	3	200 Max.	2,100 (60℃)	1,870	1.511	H	174	5,060	4	40
MIRAMER PU640	Aromatic hexafunctional acrylate		High reactivity, High hardness, Excellent chemical resistance, Good abrasion resistance, Good scratch resistance	6	1(G) Max.	34,000	1,340	1.503	4H	216	N/A	N/A	40
URETHANE METHACRYLATE													
MIRAMER PU2421NT	Aliphatic difunctional methacrylate		Organotin-free, Low MeHQ contents, Low yellowing	2	100 Max.	9,000	600	1.483	< 6B	112	8,890	8	> 300
MIRAMER PU3201NT	Aliphatic trifunctional methacrylate	HPMA 35	Organotin-free, High elongation, Good flexibility, Low MeHQ contents	3	200 Max.	19,000	11,000	1.474	2B	109	4,030	160	160
MIRAMER PU3701	Aromatic trifunctional methacrylate	2-HEMA 1	High elongation, Good flexibility	3	100 Max.	52,000	15,000	1.474	< 6B	35	330	82	160
ORGANOTIN-FREE URETHANE ACRYLATE													
MIRAMER PU256NT	Aliphatic difunctional acrylate		High elongation, Good flexibility, Low MeHQ contents	2	100 Max.	6,850 (60℃)	3,100	1.478	< 6B	25	1,440	118	320
MIRAMER PU2016NT	Aliphatic difunctional acrylate	PEG200DA 12	High elongation, Good flexibility, Low yellowing	2	100 Max.	6,000 (60℃)	4,000	1.482	< 6B	32	910	85	200
MIRAMER PU2510NT	Aliphatic difunctional acrylate		High reactivity, High elongation, Excellent abrasion resistance, Good flexiblility	2	100 Max.	25,000 (60℃)	4,900	1.494	< 6B	34	1,980	109	40
MIRAMER PU3280NT	Aliphatic trifunctional acrylate	TPGDA 15 - 19	High reactivity, Excellent toughness, Good abrasion resistance	3	100 Max.	17,000 (60℃)	6,100	1.489	HB	146	7,050	11	40
MIRAMER PU3284NT	Aliphatic trifunctional acrylate	TPGDA 30 - 35	Excellent abrasion resistance, Good toughness	3	100 Max.	60,000	5,520	1.482	B	187	5,900	10	80
MIRAMER PU3440NT	Aliphatic trifunctional acrylate	HDDA 20	PETIA-free, Excellent abrasion resistance (falling sand), Excellent toughness	3	200 Max.	20,000	2,500	1.493	B	155	6,070	5	80
MIRAMER PU4150NT	Aliphatic tetrafunctional acrylate		Good abrasion resistance (falling sand)	4	300 Max.	3,500	3,000	1.482	H	49	570	21	80
MIRAMER PU610NT	Aliphatic hexafunctional acrylate		High reactivity, High hardness, Good scratch resistance	6	100 Max.	100,000	1,500	1.496	3H	219	N/A	N/A	40
MIRAMER PU620NT	Aliphatic hexafunctional acrylate		High reactivity, High hardness, Good abrasion resistance (taber), Excellent chemical resistance	6	100 Max.	38,000	2,100	1.493	3H	211	N/A	N/A	40
MIRAMER PU662NT	Aromatic hexafunctional acrylate		High reactivity, High hardness, Excellent chemical resistance	6	100 Max.	21,000	1,500	1.501	3H	211	N/A	N/A	40
MIRAMER PU664NT	Aliphatic hexafunctional acrylate		High reactivity, High hardness, Excellent chemical resistance	6	200 Max.	60,000	1,900	1.493	3H	210	N/A	N/A	40
MIRAMER PU6620NT	Aromatic hexafunctional acrylate		High reactivity, High hardness	6	1(G) Max.	28,000	1,130	1.502	3H	218	N/A	N/A	40
MIRAMER MU9800NT	Aliphatic multifunctional acrylate		High hardness, Good scratch resistance, Low shrinkage at low film weights	9	100 Max.	45,000	3,500	1.496	4H	157	N/A	N/A	40

OLIGOMERS

Epoxy Acrylate Oligomers

General Description					Chemical Properties				Physical Properties				
Product Name	Description	Dilution (%)	Key Features	Functionality	Color (APHA)	Viscosity (cps @ 25℃)	M_w (GPC)	Refractive Index (nD^{25})	Pencil Hardness (30 μm)	Pendulum hardness (30 μm)	Tensile Strength (psi)	Elongation (%)	Reactivity (mJ/cm^2)
EPOXY ACRYLATE (Bisphenol A type)													
MIRAMER PE210	Bisphenol A epoxy acrylate		Monomer-free version of Bisphenol A epoxy acrylate	2	50 Max.	5,400 (60℃)	520	1.558	F	177	N/A	N/A	40
MIRAMER PE210-ET	Bisphenol A epoxy acrylate		Monomer-free version of Bisphenol A epoxy acrylate	2	100 Max.	5,800 (60℃)	520	1.557	HB	172	8,810	7	40
MIRAMER PE2120A	Bisphenol A epoxy acrylate	HDDA 20	High reactivity, High gloss, High pendulum hardness, Excellent toughness	2	100 Max.	10,000	520	1.533	HB	172	7,200	5	40
MIRAMER PE2120B	Bisphenol A epoxy acrylate	TPGDA 20	High reactivity, High gloss, Excellent toughness	2	100 Max.	570 (60℃)	520	1.534	HB	165	6,270	4	40
MIRAMER PE2120C	Bisphenol A epoxy acrylate	TMPTA 20	High reactivity, High gloss, High pendulum hardness	2	100 Max.	1,000 (60℃)	520	1.539	HB	162	4,440	4	40
MIRAMER PE2130G	Bisphenol A epoxy acrylate	GPTA 30	High reactivity, High gloss	2	100 Max.	22,000	520	1.524	H	157	2,060	3	40
EPOXY METHACRYLATE (Bisphenol A type)													
MIRAMER PE250	Bisphenol A epoxy methacrylate		High reactivity, High gloss, High pendulum hardness, Good abrasion resistance (falling sand)	2	100 Max.	3,800 (60℃)	550	1.549	H	174	N/A	N/A	40
EPOXY ACRYLATE (Novolac type)													
MIRAMER SC6300	Phenol novolac epoxy acrylate	TMPTA 50	Phenol type, High reactivity, High gloss, Good heat resistance	4	10(G) Max.	20,000	1,400	1.525	H	162	N/A	N/A	40
EPOXY ACRYLATE (Modified type)													
MIRAMER PE110H	Phenol epoxy acrylate		Excellent adhesion, Excellent flexibility	1	2(G) Max.	200	220	1.525	< 6B	60	N/A	N/A	> 300
MIRAMER PE120	Aliphatic alkyl epoxy acrylate		Excellent weatherability, Excellent adhesion	1	3(G) Max.	44	334	1.458	< 6B	N/A	N/A	N/A	> 300
MIRAMER PE230	Aliphatic alkyl epoxy acrylate		Good flexibility	2	100 Max.	800	650	1.480	< 6B	51	1,230	19	80
MIRAMER PE310	Soyabean oil epoxy acrylate		Good pigment wetting, Good flexibility	3 - 4	5(G) Max.	33,000	2,200	1.490	5B	82	1,380	17	120
MIRAMER EA2235	Modified epoxy acrylate		Good abrasion resistance, Good flexibility	2	5(G) Max.	1,200	860	1.482	B	73	2,590	24	40
MIRAMER EA2259	Modified epoxy acrylate		High elongation, High gloss, Good elasticity	2	2(G) Max.	500 (60℃)	840	1.529	2B	136	5,460	9	40
MIRAMER EA2280	Modified epoxy acrylate		High reactivity, High gloss, Excellent abrasion resistance, Good elasticity	2	1(G) Max.	2,600 (65.5℃)	1,600	1.524	2B	129	3,880	17	40
MIRAMER ME2110	Modified epoxy acrylate	TPGDA 5 - 10	High gloss, Good abrasion resistance, Good toughness	2	200 Max.	4,300 (65.5℃)	1,900	1.536	F	170	8,600	8	40
MIRAMER ME2500	Modified epoxy acrylate		Good pigment wetting, High reactivity, High gloss	2	6(G) Max.	2,500 (65.5℃)	1,200	1.544	B	101	3,800	12	40
MIRAMER ME2570	Modified epoxy acrylate	GPTA 20 - 24	Good pigment wetting, High gloss, High reactivity	2	6(G) Max.	44,000	1,200	1.526	3B	147	5,460	8	40
MIRAMER ME2600	Modified epoxy acrylate		High reactivity, High gloss, Excellent abrasion resistance	2	200 Max.	2,600 (60℃)	520	1.547	4B	167	5,900	6	40
MIRAMER ME2700	Modified epoxy acrylate		Good flexibility	2	1(G) Max.	1,270 (60℃)	1,500	1.514	< 6B	101	2,200	63	80
MIRAMER ME2100EC	Modified epoxy acrylate		High gloss, Good chemical resistance, Good adhesion	2	4(G) Max.	3,600 (60℃)	3,200	1.531	5B	41	720	96	80

OLIGOMERS

Polyester Acrylate Oligomers
Water Borne Acrylate Oligomers

General Description					Chemical Properties				Physical Properties				
Product Name	**Description**	**Dilution (%)**	**Key Features**	**Functionality**	**Color (APHA)**	**Viscosity (cps @ 25°C)**	**M_w (GPC)**	**Refractive Index (nD^{25})**	**Pencil Hardness (30 μm)**	**Pendulum hardness (30 μm)**	**Tensile Strength (psi)**	**Elongation (%)**	**Reactivity (mJ/cm^2)**
POLYESTER ACRYLATE													
MIRAMER PS2180	Difunctional polyester acrylate		Good adhesion, Good flexibility, Low viscosity	2	200 Max.	39	512	1.450	< 6B	70	N/A	N/A	> 300
MIRAMER PS3010	Trifunctional polyester acrylate		High reactivity	3	200 Max.	45,000	1,800	1.511	2B	83	2,550	38	40
MIRAMER PS420	Tetrafunctional polyester acrylate		Good flexibility, Low viscosity	4	2(G) Max.	500	1,800	1.466	< 6B	78	2,640	11	160
MIRAMER PS460	Tetrafunctional polyester acrylate		Excellent toughness	4	2(G) Max.	25,000	3,700	1.490	B	116	6,120	8	120
MIRAMER PS4040	Tetrafunctional polyester acrylate		Good chemical resistance	4	200 Max.	6,300	1,300	1.498	HB	139	N/A	N/A	80
MIRAMER PS610	Hexafunctional polyester acrylate		High reactivity, Excellent scratch resistance, Good chemical resistance	6	2(G) Max.	26,000	5,400	1.490	4H	201	N/A	N/A	40
MIRAMER PS6180	Hexafunctional polyester acrylate		High UV LED reactivity, Good scratch resistance (steel wool), Low viscosity, Low shrinkage	6	200 Max.	370	2,150	1.477	F	77	2,000	7	120
MIRAMER PS6300	Hexafunctional polyester acrylate		High gloss, High hardness, Excellent chemical resistance	6	200 Max.	35,000	3,000	1.503	4H	210	N/A	N/A	40
MIRAMER PS6430	Hexafunctional polyester acrylate		Good heat resistance, Good pigment wetting	6	8(G) Max.	8,800	4,000	1.489	3H	128	N/A	N/A	80
MIRAMER PS9400F	Tetrafunctional polyester acrylate		Toluene-free, Good pigment wetting, Good flexibility, Good lithographic behavior	4	Yellow	6,200 (60℃)	7,500	1.503	4B	104	2,350	33	120
MIRAMER PS9420F	Tetrafunctional polyester acrylate		Toluene-free, Good flexibility, Low viscosity	4	100 Max.	600	2,100	1.465	< 6B	85	2,700	10	240
MIRAMER PS9600F	Hexafunctional polyester acrylate		Toluene-free, Excellent pigment wetting, Good flow property, Low misting	6	Dark brown	37,000	3,200	1.490	HB	144	1,800	3	200
WATER BORNE ACRYLATE													
MIRAMER WB2286NT	UV curing Urethane acrylate Dispersion	H_2O 60	Excellent pigment wetting, Excellent wood wetting and adhesion	-	White	56	N/A	N/A	B (60 μm)	126 (60 μm)	4,850	20	120
MIRAMER WB2211NT	UV curing Urethane acrylate Dispersion	H_2O 55	High solid, Excellent wood wetting, adhesion and High flexibility, Excellent dye compatibility and 3D effect	2	Opaque	480	N/A	N/A	2B (60 μm)	200 (80 μm)	4,420	21	40
MIRAMER WB2522NT	UV curing Urethane acrylate Dispersion	H_2O 65	Physical dry, Good flexibility and Chemical resistance, Mono and dual cure	2	Opaque	570	N/A	N/A	2B (60 μm)	200 (80 μm)	3,880	78	N/A
MIRAMER WB2814NT	UV curing Urethane acrylate Dispersion	H_2O 58	Physical dry, Excellent flexibility and durability	-	White	500 Max.	N/A	N/A	4B (60 μm)	135 (60 μm)	2,680	75	N/A
MIRAMER WB3643NT	UV curing Urethane acrylate Dispersion	H_2O 62	Physical dry, Very flexible, Excellent chemical resistance, Mono and dual cure	-	White	38	N/A	N/A	-	-	-	-	-
MIRAMER WB4510NT	UV curing Urethane acrylate Dispersion	H_2O 64	Excellent chemical resistance and Good scratch resistance, Excellent adhesion on wood and plastic	5	White	210	N/A	N/A	2H (60 μm)	210 (60 μm)	N/A	N/A	40
MIRAMER WB8365NT	UV curing Urethane acrylate Dispersion	H_2O 62	Excellent physically drying, High scratch and chemical resistance, Faster water release	-	White	230	N/A	N/A	3H (60μm)	183 (60 μm)	N/A	N/A	N/A
MIRAMER W4690NT	UV curing Urethane acrylate Dispersion	H_2O 58	Excellent scratch resistance, High reactivity, Outstanding chemical resistance and adhesion on wood and plastic, Superior abrasion resistance (RCA)	5	Semi-transparent	440	N/A	N/A	3H (60 μm)	222 (60 μm)	N/A	N/A	40

OLIGOMERS

Specialty Acrylate Oligomers

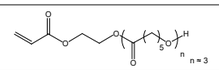
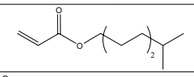
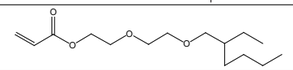
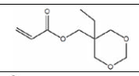
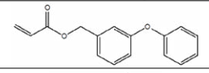
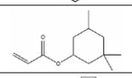
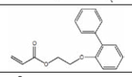
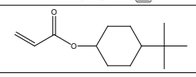
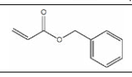
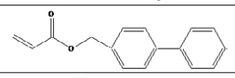
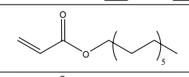
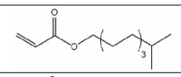
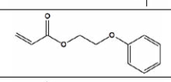
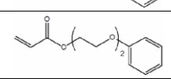
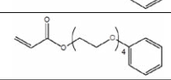
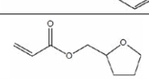
General Description					Chemical Properties				Physical Properties				
Product Name	**Description**	**Dilution (%)**	**Key Features**	**Functionality**	**Color (APHA)**	**Viscosity (cps @ 25℃)**	**M_w (GPC)**	**Refractive Index (nD^{25})**	**Pencil Hardness (30 μm)**	**Pendulum hardness (30 μm)**	**Tensile Strength (psi)**	**Elongation (%)**	**Reactivity (mJ/cm^2)**
WATER SOLUBLE ACRYLATE													
MIRAMER WS2100	Aliphatic alkyl epoxy acrylate		High reactivity, Good flexibility	2	2(G) Max.	1,500	750	1.484	4B	35	520	11	40
MIRAMER WS2601NT	Aliphatic urethane acrylate	H_2O 7.5	Excellent flexibility	2	100 Max.	1,880	N/A	1.474	< 6B	30	430	53	80
MIRAMER WS2281NT	Aliphatic urethane acrylate	DMM/MP 20	High hardness and flexibility, Excellent wood wetting, High gloss, BPA-free, Organotin-free	2	Clear	4,800	5,000	N/A	-	160 (80 μm)	-	-	-
HIGH REFRACTIVE INDEX ACRYLATE													
MIRAMER HR6042	Bisfluorene acrylate	OPPEA 40	High reactivity, High gloss, High refractive index, Excellent toughness	2	80 Max.	21,000	550	1.600	< 6B	152	6,090	5	40
MIRAMER HR6100	Modified bisphenol fluorene acrylate		High refractive index, High gloss, Good flexibility	2	150 Max.	11,000	900	1.562	< 6B	55	1,150	55	80
MIRAMER HR6200	Modified bisphenol fluorene acrylate		High refractive index, Good flexibility	2	100 Max.	2,600	1,350	1.530	< 6B	125	150	13	40
MIRAMER HR3200	Aromatic urethane acrylate	OPPEA 20 Acrylated resin 15	Non-halogen type, High refractive index, High pendulum hardness	4	100 Max.	1,300 (60℃)	900	1.565	H	181	7,300	5	80
SILICONE ACRYLATE													
MIRAMER SIU2400	Silicone urethane acrylate	TPGDA 10	High reactivity, Good slipness, Low yellowing	10	100 Max.	40,000	8,000	1.472	B	112	N/A	N/A	40
MIRAMER SIP910	Silicone polyester acrylate		Excellent slipness	2	10(G) Max.	200	6,600	1.459	< 6B	N/A	N/A	N/A	> 300
CAPROLACTONE ACRYLATE													
MIRAMER SC1010	Caprolactone methacrylate		OH value: 220~230 mgKOH/g, Good flexibility, Low shrinkage	1	100 Max.	30	244	1.460	N/A	N/A	N/A	N/A	N/A
MIRAMER SC1033S	Caprolactone methacrylate		OH value:110~125 mgKOH/g, Low shrinkage, Good flexibility	1	180 Max.	130	472	1.467	N/A	N/A	N/A	N/A	N/A
MELAMINE ACRYLATE													
MIRAMER SC9610	Melamine acrylate		High hardness, High gloss, Excellent scratch resistance, Good chemical resistance	> 3	100 Max.	3,000	1,500	1.516	3H	152	N/A	N/A	80
BUTADIENE ACRYLATE													
MIRAMER MB2012	Butadiene acrylate	IBOA 30	Good flexibility, Low yellowing	2	200 Max.	18,500	6,400	1.488	< 6B	31	650	14	80
DENDRITIC ACRYLATE													
MIRAMER SP1106	Dendritic acrylate		Excellent chemical and scratch resistance, Good pigment wetting, Low yellowing	18	200 Max.	400	2,600	1.477	3H	183	N/A	N/A	120

OLIGOMER & OTHER

General Description					Chemical Properties				Physical Properties				
Product Name	**Description**	**Dilution (%)**	**Key Features**	**Functionality**	**Color (APHA)**	**Viscosity (cps @ 25℃)**	**M_w (GPC)**	**Refractive Index (nD^{25})**	**Pencil Hardness (30 μm)**	**Pendulum hardness (30 μm)**	**Tensile Strength (psi)**	**Elongation (%)**	**Reactivity (mJ/cm^2)**
ACRYLIC ACRYLATE													
MIRAMER SC9060	Acrylic acrylate	HDDA 23 TPGDA 23	Excellent adhesion, Excellent flexibility	2	2(G) Max.	18,300	60,000	1.478	< 6B	130	N/A	N/A	200
MIRAMER SC9070	Acrylic acrylate	$TMP(EO)_3TA$ 50	Excellent adhesion, Toluene-free	3	3(G) Max.	4,400 (60℃)	5,000 - 8,000	1.487	2B	159	N/A	N/A	200
MIRAMER SC9213	Acrylic acrylate	HDDA 60	Excellent adhesion, Good flexibility	2	50 Max.	25,000	40,200	1.470	5B	188	1,200	1	120
MIRAMER S5242	Acrylic acrylate	DPGDA 40	Excellent adhesion, Excellent flexibility	2	5(G) Max.	38,000	11,470	1.468	< 6B	31	N/A	N/A	> 300
ADHESION PROMOTER													
MIRAMER SC1400	Phosphate methacrylate		Improving adhesion to metal, glass and plastic (Acid value: 220~350 mgKOH/g)	1.5	250 Max.	1,100	1,190	1.467	N/A	N/A	N/A	N/A	N/A
MIRAMER PS2522	Difunctional polyester acrylate	DPGDA 20 - 30	Excellent adhesion and flexibility	2	2(G) Max.	7,000 (60℃)	6,950	1.521	< 6B	102	N/A	N/A	80
MIRAMER PS4820	Chlorinated polyester acrylate	GPTA 40	Excellent adhesion	3	3(G) Max.	1,600 (60℃)	-	1.504	6B	141	N/A	N/A	80
MIRAMER SC6632	Alkali strippable polyester acrylate		Acid functionality, Excellent adhesion, Good pigment wetting	1	100 Max.	4,000	330	1.527	6B	44	N/A	N/A	80
MIRAMER SC6640	Alkali strippable polyester acrylate		Acid functionality, Excellent flexibility	1	200 Max.	200	216	1.463	< 6B	25	N/A	N/A	80
OLIGO AMINE ACRYLATE													
PHOTOCRYL A104	Amine acrylate		High reactivity (Amine value: 40~43 mgKOH/g)	4	100 Max.	510	1,630	1.477	HB	92	2,390	9	40
MIRAMER AS1000	Amine acrylate		High reactivity (Amine value: 35~40 mgKOH/g)	3.5	100 Max.	280	1,320	1.468	2B	90	2,410	9	40
MIRAMER AS3500	Amine acrylate		Very good reactivity (Amine Value: 57~65 mgKOH/g)	3.5	3(G) Max.	3,500	4,700	1.472	3B	60	1,280	14	40
MIRAMER AS6200	Amine acrylate		High UV LED reactivity, Good scratch resistance, Low viscosity (Amine value: 50~60 mgKOH/g)	6	3(G) Max.	350	2,680	1.478	< 6B	73	240	7	40
MIRAMER LR3600	Amine acrylate		Low residual acid and solvent (Amine Value: 50~56 mgKOH/g)	2.5	2(G) Max.	72	640	1.469	< 6B	55	520	7	80
AMINE SYNERGIST													
PHOTOCRYL A101	Acrylated amine synergist		Low viscosity, Good reactivity (Amine Value: 185~205 mgKOH/g)	2	3(G) Max.	21	460	1.450	N/A	N/A	N/A	N/A	N/A
MIRAMER AS2010	Acrylated amine synergist		High efficient co-initiator (Amine Value: 135~145 mgKOH/g)	2	1(G) Max.	1,200	1,920	1.481	< 6B	140	120	8	40
MIRAMER AS5142	Acrylated amine synergist		High efficiency (Amine value: 200~250 mgKOH/g)	1	2(G) Max.	20	-	1.450	N/A	N/A	N/A	N/A	N/A
SUCROSE BENZOATE (INERT RESIN)													
MIRAMER SB	Sucrose benzoate		Softening point 95~101℃, Maintaining gloss compared with inorganic fillers	-	50 Max.	Flake	1,114	1.577	N/A	N/A	N/A	N/A	N/A
POWDER COATING ADDITIVE													
Benzoin	2-Hydroxy-1,2-diphenyl ethanone		Anti-crater agent / Intermediate for pharmaceutical compound (Purity: 99.5% Min.)	-	10 Max.	Powder	212	-	N/A	N/A	N/A	N/A	N/A

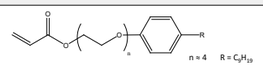
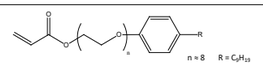
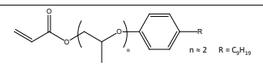
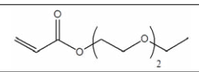
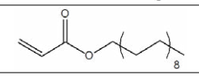
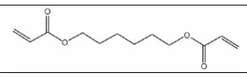
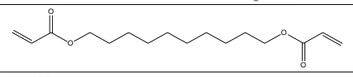
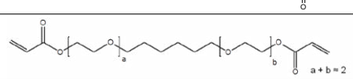
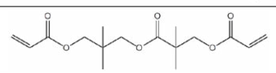
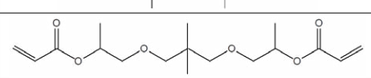
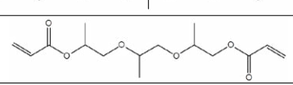
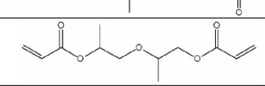
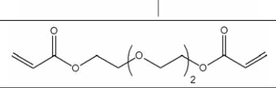
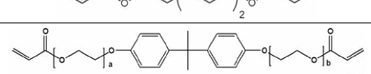
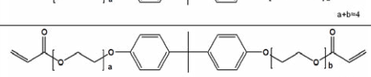
MONOMERS

Acrylate Monomers

General Description					Chemical Properties					
Product Name	**Description**	**Structure**	**CAS No.**	**Key Features**	**M.W.**	**Color (APHA)**	**Viscosity (cps @ 25°C)**	**Refractive Index (nD^{25})**	**Surface Tension (dyne/cm @ 25°C)**	**Tg (°C)**
MONOFUNCTIONAL ACRYLATE										
MIRAMER M100	**CA** Caprolactone Acrylate		110489-05-9	Hydroxyl functionality, Good flexibility, Low shrinkage	344	100 Max.	67 - 82	1.465	42.0	-54
MIRAMER M1084	**IOA** Isooctyl Acrylate		29590-42-9	Good adhesion, Good flexibility	184	100 Max.	10 Max.	1.434	27.0	-58
MIRAMER M1086	**EH(EO)$_2$A** 2-Ethylhexyl diglycol Acrylate		117646-83-0	Good adhesion, Good flexibility	272	80 Max.	15 Max.	1.443	29.8	N/A
MIRAMER M1110	**CTFA** Cyclic trimethylolpropane formal Acrylate		66492-51-1	Good adhesion, Good toughness	200	100 Max.	10 - 20	1.462	36.2	14
MIRAMER M1122	**PBA** Phenoxy benzyl Acrylate		409325-06-0	High refractive index, Good adhesion	254	100 Max.	12 - 20	1.565	41.4	6
MIRAMER M1130	**TMCHA** Trimethyl cyclohexyl Acrylate		86178-38-3	Good adhesion, Low surface tension, Low shrinkage	196	150 Max.	1 - 10	1.453	26.3	43
MIRAMER M1142	**OPPEA** o-Phenylphenol EO Acrylate		72009-86-0	High refractive index, Good adhesion	268	100 Max.	110 - 160	1.577	42.0	33
MIRAMER M1150	**TBCHA** 4-Tert-butylcyclohexyl Acrylate		84100-23-2	Good adhesion	210	100 Max.	5 - 20	1.462	29.4	65
MIRAMER M1182	**BZA** Benzyl Acrylate		2495-35-4	Good adhesion, High refractive index, Low viscosity	162	100 Max.	1 - 10	1.516	36.7	11
MIRAMER M1192	**BPMA** Biphenylmethyl Acrylate		54140-58-8	High refractive index, Low shrinkage	238	200 Max.	20 - 40	1.600	42.5	6
MIRAMER M122	**LA** Lauryl Acrylate		2156-97-0	Good flexibility, solvent resistance & adhesion, Low shrinkage, Hydrophobic characteristic	240	150 Max.	1 - 15	1.442	29.5	N/A
MIRAMER M130	**IDA** Isodecyl Acrylate		1330-61-6	Good flexibility, Good adhesion, Hydrophobic characteristic	212	150 Max.	10 Max.	1.440	28.2	-60
MIRAMER M140	**PHEA** Phenol (EO) Acrylate		48145-04-6	Good adhesion, Good flexibility, High refractive index	192	100 Max.	5 - 15	1.517	40.1	7
MIRAMER M142	**PHEA-2** Phenol (EO)$_2$ Acrylate		56641-05-5	Good adhesion, Good flexibility	236	150 Max.	15 - 25	1.507	40.5	-13
MIRAMER M144	**PHEA-4** Phenol (EO)$_4$ Acrylate		56641-05-5	Good adhesion, Good flexibility, Low shrinkage	324	200 Max.	20 - 50	1.500	41.4	-32
MIRAMER M150	**THFA** Tetrahydrofurfuryl Acrylate		2399-48-6	Good adhesion	156	100 Max.	10 Max.	1.456	35.9	-15

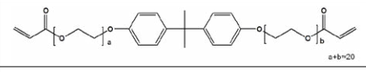
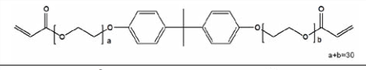
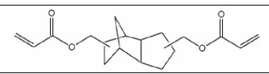
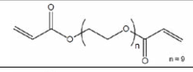
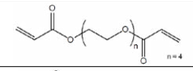
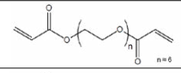
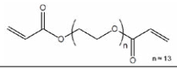
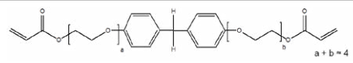
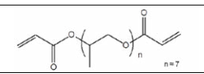
MONOMERS

Acrylate Monomers

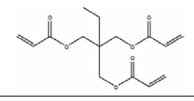
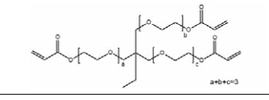
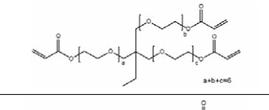
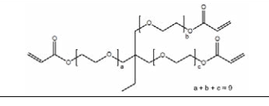
General Description					Chemical Properties					
Product Name	**Description**	**Structure**	**CAS No.**	**Key Features**	**M.W.**	**Color (APHA)**	**Viscosity (cps @ 25°C)**	**Refractive Index (nD^{25})**	**Surface Tension (dyne/cm @ 25°C)**	**Tg (°C)**
MIRAMER M164	**$NP(EO)_4A$** Nonyl phenol $(EO)_4$ Acrylate		50974-47-5	Good adhesion, Good flexibility, Low shrinkage	450	150 Max.	70 - 130	1.495	34.3	-28
MIRAMER M166	**$NP(EO)_8A$** Nonyl phenol $(EO)_8$ Acrylate		50974-47-5	Good adhesion, Good flexibility, Low shrinkage	626	100 Max.	120 - 180	1.489	34.9	-45
MIRAMER M1602	**$NP(PO)_2A$** Nonyl phenol $(PO)_2$ Acrylate		71926-19-7	Good flexibility, Good adhesion	391	150 Max.	100 - 150	1.492	32.1	-20
MIRAMER M170	**EOEOEA** Ethoxy ethoxy ethyl Acrylate		7328-17-8	Good flexibility, Good adhesion, Hydrophilic characteristic	188	150 Max.	1 - 6	1.436	29.7	-56
MIRAMER M180	**SA** Stearyl Acrylate		4813-57-4	Good flexibility, Good water resistance, Low shrinkage, Hydrophobic characteristic	325	150 Max.	solid	1.448	N/A	N/A
DIFUNCTIONAL ACRYLATE										
MIRAMER M200	**HDDA** 1,6-Hexanediol Diacrylate		13048-33-4	Good cutting power, Good adhesion, Non-yellowing	226	30 Max.	1 - 10	1.455	35.9	43
MIRAMER M2010	**DDDA** 1,10-Decanediol Diacrylate		13048-34-5	Good flexibility, Good adhesion, Hydrophobic characteristic	282	100 Max.	7 - 15	1.458	34.8	36
MIRAMER M202	**$HD(EO)_nDA$** 1,6-Hexanediol $(EO)_n$ Diacrylate		84170-27-4	Good flexibility, Good adhesion, Low volatility	314	50 Max.	10 - 30	1.460	37.8	-8
MIRAMER M210	**HPNDA** Hydroxyl pivalic acid neopentyl glycol Diacrylate		30145-51-8	Good adhesion, Good hardness	312	100 Max.	15 - 30	1.453	33.2	111
MIRAMER M216	**$NPG(PO)_2DA$** Neopentylglycol $(PO)_2$ Diacrylate		84170-74-1	Good adhesion, Good wetting	328	100 Max.	10 - 30	1.447	30.6	32
MIRAMER M220	**TPGDA** Tripropylene glycol Diacrylate		42978-66-5	Good flexibility, Good cutting power	300	50 Max.	10 - 20	1.449	33.3	62
MIRAMER M222	**DPGDA** Dipropylene glycol Diacrylate		57472-68-1	Good cutting power, Good adhesion, High Tg	242	50 Max.	5 - 15	1.449	33.5	102
MIRAMER M232	**TEGDA** Triethylene glycol Diacrylate		1680-21-3	Good flexibility, Hydrophilic characteristic	258	100 Max.	10 - 20	1.462	38.4	46
MIRAMER M240	**$BPA(EO)_4DA$** Bisphenol A $(EO)_4$ Diacrylate		64401-02-1	Good chemical resistance, Good heat resistance, High refractive index, Low shrinkage	512	100 Max.	900 - 1,300	1.537	44.5	42
MIRAMER M244	**$BPA(EO)_3DA$** Bisphenol A $(EO)_3$ Diacrylate		64401-02-1	Good chemical resistance, Good heat resistance, High refractive index	468	100 Max.	1,000 - 2,000	1.545	43.7	67
MIRAMER M2100	**$BPA(EO)_{10}DA$** Bisphenol A $(EO)_{10}$ Diacrylate		64401-02-1	Good flexibility, Good adhesion, Good hardness, Low shrinkage	776	100 Max.	600 - 700	1.516	44.0	-7

MONOMERS

Acrylate Monomers

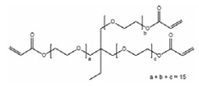
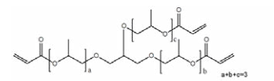
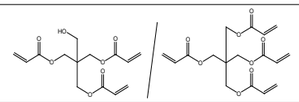
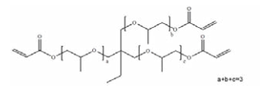
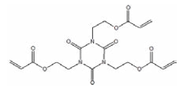
General Description					Chemical Properties					
Product Name	**Description**	**Structure**	**CAS No.**	**Key Features**	**M.W.**	**Color (APHA)**	**Viscosity (cps @ 25℃)**	**Refractive Index (nD^{25})**	**Surface Tension (dyne/cm @ 25°C)**	**Tg (°C)**
MIRAMER M2200	**BPA(EO)$_{20}$DA** Bisphenol A (EO)$_{20}$ Diacrylate		64401-02-1	Good flexibility, Good adhesion, Good hardness	1,216	80 Max.	550 - 750	1.500	44.4	-37
MIRAMER M2300	**BPA(EO)$_{30}$DA** Bisphenol A (EO)$_{30}$ Diacrylate		64401-02-1	Good flexibility, Good adhesion, Low shrinkage	1,656	200 Max.	700 - 1,000	1.493	44.3	-57
MIRAMER M262	**TCDDA** Tricyclodecane dimethanol Diacrylate		42594-17-2	Good adhesion, Good toughness, Good heat resistance, Good chemical resistance, Non-yellowing	304	200 Max.	120 - 150	1.503	38.0	110
MIRAMER M280	**PEG400DA** Polyethylene glycol 400 Diacrylate		26570-48-9	Good flexibility, Low shrinkage, Hydrophilic characteristic	508	50 Max.	45 - 65	1.467	41.6	-33
MIRAMER M282	**PEG200DA** Polyethylene glycol 200 Diacrylate		26570-48-9	Good flexibility, Hydrophilic characteristic	308	150 Max.	15 - 35	1.463	40.1	14
MIRAMER M284	**PEG300DA** Polyethylene glycol 300 Diacrylate		26570-48-9	Good flexibility, Hydrophilic characteristic	408	100 Max.	20 - 50	1.465	41.6	-13
MIRAMER M286	**PEG600DA** Polyethylene glycol 600 Diacrylate		26570-48-9	Good flexibility, Low shrinkage, Hydrophilic characteristic	708	150 Max.	80 - 120	1.469	42.3	-41
MIRAMER M290	**BPF(EO)$_4$DA** Bisphenol F (EO)$_4$ Diacrylate		120750-67-6	Good heat resistance, Good chemical resistance, High refractive index	500	80 Max.	500 - 700	1.539	44.2	43
MIRAMER M2040	**PPG400DA** Polypropylene glycol 400 Diacrylate		52496-08-9	Good flexibility, Low shrinkage, Hydrophilic characteristic	508	150 Max.	30 - 50	1.450	32.4	-24

TRIFUNCTIONAL ACRYLATES

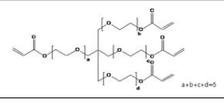
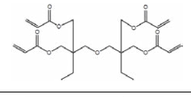
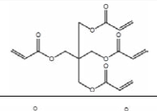
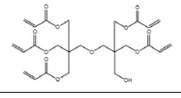
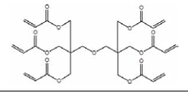
MIRAMER M300	**TMPTA** Trimethylolpropane Triacrylate		15625-89-5	Good hardness, Good chemical resistance, High reactivity	296	50 Max.	80 - 120	1.473	36.6	62
MIRAMER M3130	**TMP(EO)$_3$TA** Trimethylolpropane (EO)$_3$ Triacrylate		28961-43-5	Good chemical resistance, Good adhesion, High reactivity	428	50 Max.	50 - 70	1.470	38.1	40
MIRAMER M3160	**TMP(EO)$_6$TA** Trimethylolpropane (EO)$_6$ Triacrylate		28961-43-5	Good flexibility, High reactivity, Hydrophilic characteristic	560	80 Max.	60 - 100	1.470	39.6	22
MIRAMER M3190	**TMP(EO)$_9$TA** Trimethylolpropane (EO)$_9$ Triacrylate		28961-43-5	Good flexibility, Hydrophilic characteristic	693	200 Max.	85 - 140	1.470	40.2	-3

MONOMERS

Acrylate Monomers

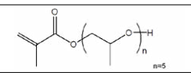
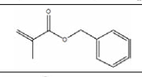
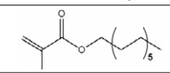
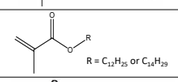
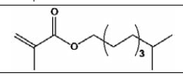
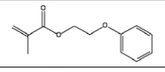
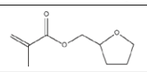
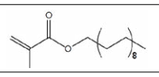
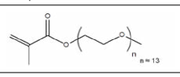
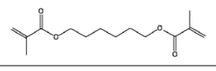
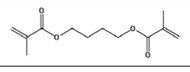
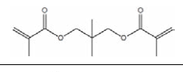
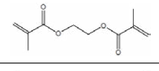
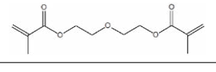
General Description					Chemical Properties					
Product Name	**Description**	**Structure**	**CAS No.**	**Key Features**	**M.W.**	**Color (APHA)**	**Viscosity (cps @ 25°C)**	**Refractive Index (nD^{25})**	**Surface Tension (dyne/cm @ 25°C)**	**Tg (°C)**
MIRAMER M3150	**TMP(EO)$_{15}$TA** Trimethylolpropane (EO)$_{15}$ Triacrylate		28961-43-5	Good flexibility, Hydrophilic characteristic	956	100 Max.	100 - 200	1.471	42.0	-31
MIRAMER M320F	**GPTA** Glycerine (PO)$_3$ Triacrylate		52408-84-1	Good pigment wetting, Good chemical resistance, High reactivity	428	50 Max.	80 – 120	1.462	36.0	35
MIRAMER M340	**PETA / PETTA** Pentaerythritol Triacrylate		3524-68-3 4986-89-4	Hydroxyl functionality, Good hardness, Good scratch resistance, High reactivity	298 352	120 Max.	1,000 - 1,800	1.486	40.6	42
MIRAMER M360	**TMP(PO)$_3$TA** Trimethylolpropane (PO)$_3$ Triacrylate		53879-54-2	Good flexibility, Good chemical resistance, High reactivity	470	150 Max.	70 - 100	1.461	34.0	27
MIRAMER M370	**THEICTA** Tris(2-hydroxy ethyl)isocyanurate Triacrylate		40220-08-4	Good heat, scratch & chemical resistance, High hardness & reactivity	423	100 Max.	900 - 1,600 (50°C)	1.508	N/A	242

MULTIFUNCTIONAL ACRYLATES

MIRAMER M4004	**PE(EO)$_n$TTA** Pentaerythritol (EO)$_n$ Tetraacrylate		51728-26-8	Good chemical resistance, Good abrasion resistance, High reactivity	571	100 Max.	120 - 200	1.476	40.9	36
MIRAMER M410	**DTMPTTA** Ditrimethylolpropane Tetraacrylate		94108-97-1	Good hardness, Good scratch resistance, Good toughness, High reactivity	467	200 Max.	450 - 750	1.476	36.0	42
MIRAMER M420	**PETTA** Pentaerythritol Tetraacrylate		4986-89-4	Good hardness, Good scratch resistance, Good chemical resistance, Good water resistance, High reactivity	352	150 Max.	solid	1.484	39.0	65
MIRAMER M500	**DPPA** Dipentaerythritol Pentaacrylate		60506-81-2	OH functionality, Good hardness, Good scratch resistance, Good chemical resistance, High reactivity	525	100 Max.	5,500 - 8,000	1.490	39.3	68
MIRAMER M600	**DPHA** Dipentaerythritol Hexaacrylate		29570-58-9	Good hardness, Good scratch resistance, Good chemical resistance, High reactivity	579	120 Max.	4,000 - 7,000	1.488	39.8	54

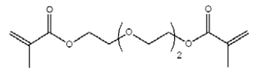
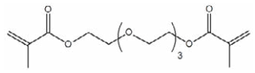
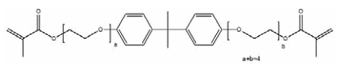
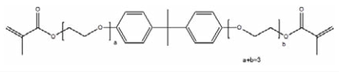
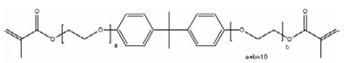
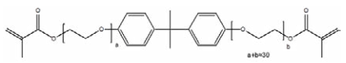
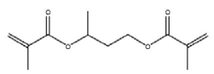
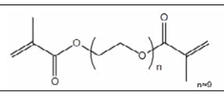
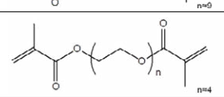
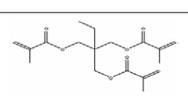
MONOMERS

Methacrylate Monomers

General Description					Chemical Properties					
Product Name	**Description**	**Structure**	**CAS No.**	**Key Features**	**M.W.**	**Color (APHA)**	**Viscosity (cps @ 25°C)**	**Refractive Index (nD^{25})**	**Surface Tension (dyne/cm @ 25°C)**	**Tg (°C)**
MONOFUNCTIONAL METHACRYLATES										
MIRAMER M1051	**PPG5MMA** Polypropylene glycol Monomethacrylate		39420-45-6	Good adhesion, Good flexibility, Low shrinkage, Low skin irritation, Slightly water soluble	376	100 Max..	25 - 50	1.447	31.8	-48
MIRAMER M1183	**BZMA** Benzyl Methacrylate		2495-37-6	Good adhesion, High refractive index, Low viscosity	176	100 Max.	10 Max.	1.512	34.8	53
MIRAMER M123	**LMA-C12** Lauryl Methacrylate		142-90-5	Good flexibility, Good solvent resistance, Good adhesion, Low shrinkage, Hydrophobic characteristic	254	50 Max.	2 - 10	1.444	29.0	N/A
MIRAMER M1241M	**LMA-C12, 14** Lauryl tetradecyl Methacrylate		142-90-5 2549-53-3	Good flexibility, Good solvent resistance, Good adhesion, Low shrinkage, Hydrophobic characteristic	254 283	50 Max.	2 - 10	1.444	29.0	N/A
MIRAMER M131	**IDMA** Isodecyl Methacrylate		29964-84-9	Good flexibility, Good adhesion, Hydrophobic characteristic	226	100 Max.	2 - 10	1.443	26.0	-41
MIRAMER M141	**PHEMA** Phenoxy Methacrylate		10595-06-9	Good adhesion, Good flexibility, High refractive index	206	100 Max.	1 - 10	1.510	37.0	47
MIRAMER M151	**THFMA** Tetrahydrofurfuryl Methacrylate		2455-24-5	Good adhesion	170	150 Max.	10 Max.	1.457	29.1	47
MIRAMER M181	**SMA** Stearyl Methacrylate		32360-05-7	Good flexibility, Good water resistance, Low shrinkage, Hydrophobic characteristic	339	80 Max.	solid	1.450	N/A	38
MIRAMER M193	**MPEG600MA** Methoxy PEG600 Methacrylate		26915-72-0	Good flexibility, Low shrinkage, Hydrophilic characteristic	668	100 Max.	40 - 100	1.461	40.1	-60
DIFUNCTIONAL METHACRYLATES										
MIRAMER M201	**HDDMA** 1,6-Hexanediol Dimethacrylate		6606-59-3	Good adhesion	254	100 Max.	1 - 10	1.456	33.4	55
MIRAMER M205	**BDDMA** 1,4-Butanediol Dimethacrylate		2082-81-7	Good water resistance, Good chemical resistance	226	100 Max.	1 - 10	1.456	32.3	55
MIRAMER M213	**NPGDMA** Neopentyl glycol Dimethacrylate		1985-51-9	Good water resistance, Good heat resistance	240	50 Max.	10 Max.	1.451	31.3	56
MIRAMER M221	**EGDMA** Ethylene glycol Dimethacrylate		97-90-5	Good chemical resistance, High cross-linking density, Low color index	198	50 Max.	1 - 6	1.453	33.1	54
MIRAMER M231	**DEGDMA** Diethylene glycol Dimethacrylate		2358-84-1	Good water resistance, Good hardness	242	150 Max.	1 - 10	1.457	34.2	58

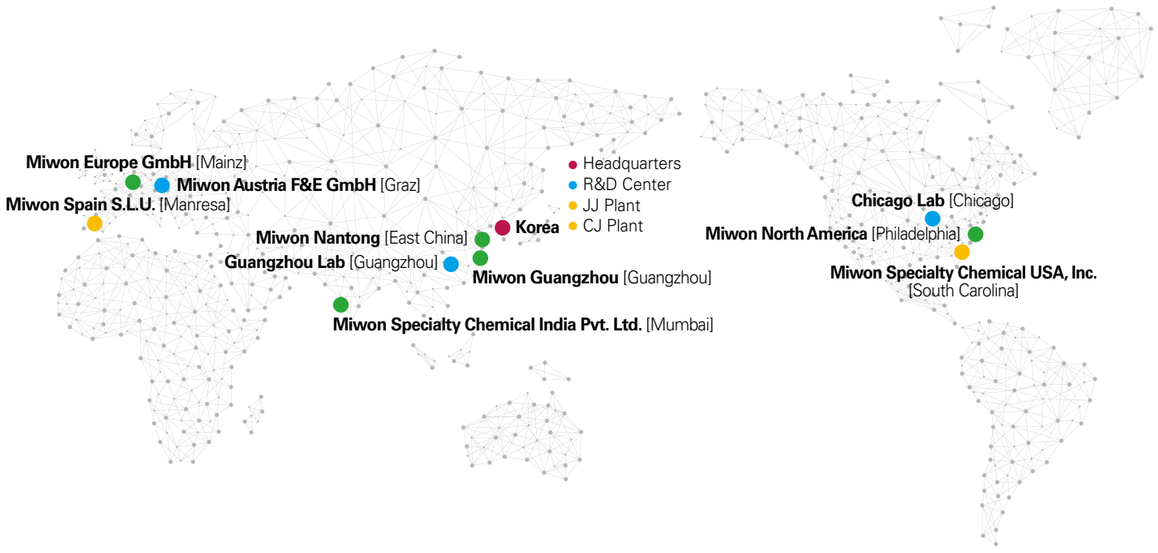
MONOMERS

Methacrylate Monomers

General Description					Chemical Properties					
Product Name	**Description**	**Structure**	**CAS No.**	**Key Features**	**M.W.**	**Color (APHA)**	**Viscosity (cps @ 25°C)**	**Refractive Index (nD^{25})**	**Surface Tension (dyne/cm @ 25°C)**	**Tg (°C)**
DIFUNCTIONAL METHACRYLATES										
MIRAMER M233	**TEGDMA** Triethylene glycol Dimethacrylate		109-16-0	Good flexibility, Hydrophilic characteristic	286	150 Max.	5 - 30	1.459	35.0	53
MIRAMER M235	**T4EGDMA** Tetraethylene glycol Dimethacrylate		109-17-1	Good flexibility, Hydrophilic characteristic	330	80 Max.	10 - 15	1.458	35.9	53
MIRAMER M241	**BPA(EO)$_4$DMA** Bisphenol A (EO)$_4$ Dimethacrylate		41637-38-1	Good heat resistance, Good chemical resistance, High refractive index, Low shrinkage	540	100 Max.	500 - 900	1.529	40.0	82
MIRAMER M245	**BPA(EO)$_3$DMA** Bisphenol A (EO)$_3$ Dimethacrylate		41637-38-1	Good heat resistance, Good chemical resistance, High refractive index, Low shrinkage	496	80 Max.	700 - 1,200	1.538	40.1	65
MIRAMER M2101	**BPA(EO)$_{10}$DMA** Bisphenol A (EO)$_{10}$ Dimethacrylate		41637-38-1	Good heat resistance, High reactivity, Low shrinkage	804	100 Max.	300 - 500	1.513	42.6	3
MIRAMER M2301	**BPA(EO)$_{30}$DMA** Bisphenol A (EO)$_{30}$ Dimethacrylate		41637-38-1	Good flexibility, Low shrinkage	1,684	100 Max.	500 - 700	1.492	44.0	-45
MIRAMER M251	**BGDMA** 1,3-Butylene glycol Dimethacrylate		1189-08-8	Good chemical resistance, Good impact strength, High cross-linking density	226	60 Max.	10 Max.	1.457	30.2	60
MIRAMER M281	**PEG400DMA** Polyethylene glycol 400 Dimethacrylate		25852-47-5	Good flexibility, Low shrinkage, Hydrophilic characteristic	536	100 Max.	30 - 50	1.466	40.0	-21
MIRAMER M283	**PEG200DMA** Polyethylene glycol 200 Dimethacrylate		25852-47-5	Good flexibility, Good adhesion, Hydrophilic characteristic	336	80 Max.	10 - 15	1.462	34.1	51
TRIFUNCTIONAL METHACRYLATE										
MIRAMER M301	**TMPTMA** Trimethylolpropane Trimethacrylate		3290-92-4	Good hardness, Good chemical resistance, High cross-linking density, High reactivity	338	100 Max.	35 - 55	1.472	33.0	27

GLOBAL PRESENCE

Miwon is committed to expanding overseas in a quest for constantly making our products and services even better for your needs.



DISCLAIMER OF LIABILITY

The information presented here is accurate to the best of our knowledge. However, since we cannot anticipate all conditions of use of our products, we can suggest, but we cannot warrant, what their performances will be in a particular application. We therefore suggest that the users make their own tests to determine the suitability of our products for their specific uses.
The applications discussed are intended to illustrate general practices and trends. While we have taken every reasonable precaution to avoid such a situation, our examples of typical uses should not be construed as recommendations to use our products in violation of any patent, or as warranties of non-infringements.

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