Kowa Europe GmbH

Product Overview

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COMPANY INTRODUCTION

Since its establishment in Nagoya, Japan in 1894, Kowa Group has grown into a multinational company actively engaged in various manufacturing and trading activities in the fields of pharmaceutical, life science and information technology, textiles, machinery, and various consumer products. During its long history Kowa has consistently strived to meet the changing needs, and with its continuing entrepreneurial initiative is determined to meet the needs of future generations.

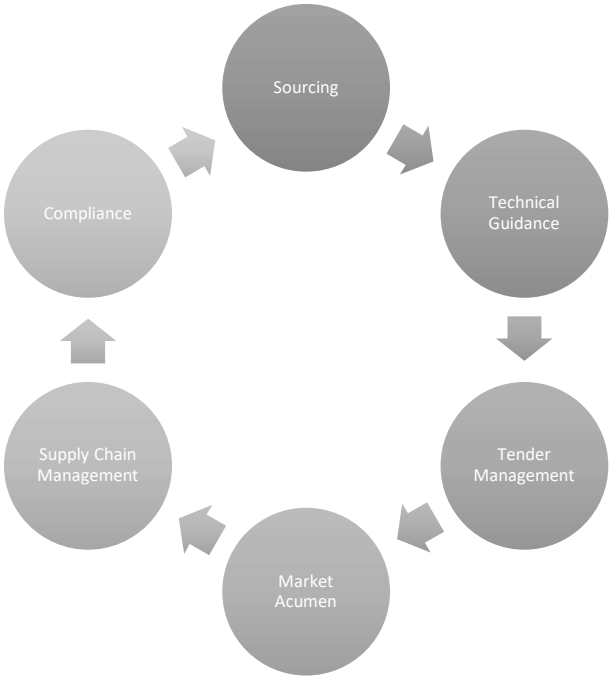
Today Kowa Europe GmbH is part of a wide distribution network connecting international supply and demand for specialty chemicals. Long-standing relationships with manufacturers in Japan are the foundation and the core of Kowa Europe's value proposition. Our strong sourcing acumen in Asia's emerging markets - China and India - create a well-balanced product portfolio that our customers in Europe profit from since over 30 years now. Our goal is not only to sell products, but to find the perfect solution for our customers.

CORE VALUES

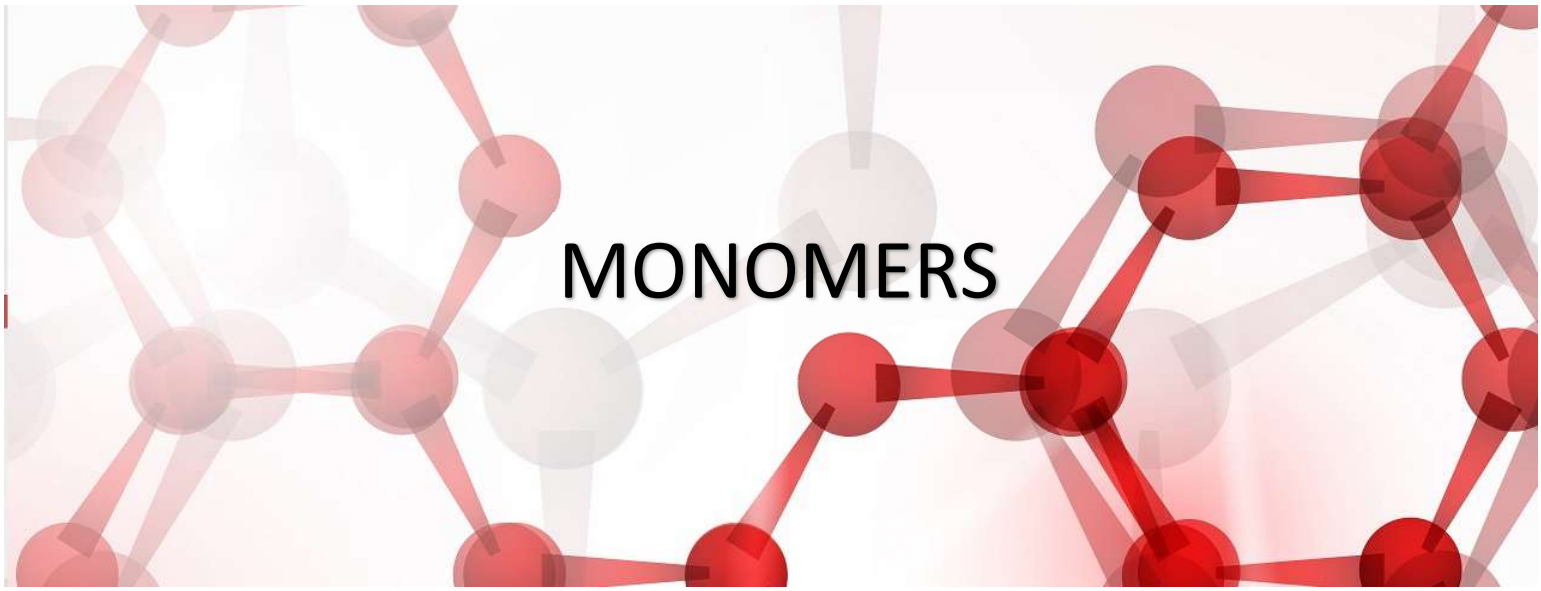
KOWA WORLDWIDE

END-TO-END VALUE CHAIN

Kowa has been a trusted partner in the Chemical Industry for many years. Our services aspire to completely fulfill our customers' demand in terms of quality, flexibility and conduct in every aspect of business by identifying key areas for improvement and relevant projects to support those improvements. We handle global tenders, technical projects, long term collaborations as well as highly specific requests with utmost care to ensure the same quality.



Our knowledge in supplying goods worldwide Kowa applies with focus on compliance with applicable laws and regulations worldwide. Legal requirements are complex and keeping up-to-date with the latest developments is crucial to ensure that we offer products to EU and non-EU customers which are safe and complete. At Kowa we have the necessary expertise for advanced compliance management in our Value Chain starting from the selection of raw materials to the supply and our products to end customers.


MONOMERS

ACRYLATE MONOMERS

	Chemical name	CAS No.	Application
HEA	2-Hydroxyethyl Acrylate	818-61-1	Adhesion promoter; Coatings; Hydrophilic monomer
HPA	2-Hydroxypropyl Acrylate	999-61-1	Adhesion promoter; Reactive diluent
4-HBA	4-Hydroxybutyl Acrylate	2478-10-6	Flexible coatings; Adhesion promoter; Reactive diluent
AIB	Isobutyl Acrylate	106-63-8	Coatings; Adhesives; Flexibilizer
TBA	t-Butyl Acrylate	1663-39-4	Coatings; Adhesives; Reactive intermediate
NOAA	n-Octyl Acrylate	2499-59-4	Pressure-sensitive adhesives; Coatings; Flexibilizer
INAA	iso-Nonyl Acrylate	51952-49-9	Pressure-sensitive adhesives; Coatings; Hydrophobic modifier
STA	Stearyl Acrylate	4813-57-4	Hydrophobic modifier; Coatings; Lubricant additive
ISTA	iso-Stearyl Acrylate	93841-48-6	Hydrophobic modifier; Additive
IBXA	Isobornyl Acrylate	5888-33-5	Coatings; UV-curable systems; High Tg monomer
CHA	Cyclohexyl Acrylate	3066-71-5	Coatings; Adhesives; Hardness modifier
TMCHA	3,3,5-Trimethylcyclohexyl Acrylate	2664-55-3	Coatings; Weather-resistant materials; Adhesives
BZA	Benzyl Acrylate	2495-35-4	Coatings; Adhesives; Reactive diluent
PEA	Phenoxyethyl Acrylate	48145-04-6	Coatings; UV-curable systems;

SPECIAL ACRYLATE MONOMERS

	Chemical name	CAS No.	Application
THFA	Tetrahydrofurfuryl Acrylate	2399-48-6	Adhesion promoter; Coatings; UV systems
2-MTA	2-Methoxyethyl Acrylate	3121-61-7	Solvent monomer; Coatings; Adhesives
CTFA	Cyclic Trimethylolpropane Formal Acrylate	66492-51-1	UV-curable systems; Crosslinking; Coatings
EOEOEA	Ethoxy Ethoxy Ethyl Acrylate	7328-17-8	Reactive diluent; Coatings; Flexibilizer
Medol-10	(2-Ethyl-2-methyl-1,3-dioxolane-4-yl)-methyl Acrylate	69701-99-1	UV-curable systems; Reactive diluent; Coatings ※Less skin irritation
BAC-45	Acrylated Polybutadiene	95321-56-5	Elastomers; Coatings; Adhesives
OXE-10	3-Ethyl-3-oxetanylmethyl Acrylate	41988-14-1	UV-curable systems; Cationic hybrid systems; Coatings
MPEG#400 acrylate	Methoxy polyethylene glycol #400 Acrylate	32171-39-4	Hydrophilic coatings; Dispersants; Adhesives
MPEG#600 acrylate	Methoxy polyethylene glycol #600 Acrylate	32171-39-4	Hydrogels; Coatings; Dispersants
E-Phenylphenol Acrylate	Ethoxylate-phenylphenol Acrylate	91442-24-9	Coatings; UV systems; Adhesives
DCPA	Dihydrodicyclopentadienyl Acrylate	12542-30-2	Adhesives; Hydrophobic modifier
TCDA	Dicyclopentanyl Acrylate	7398-56-3	Coatings; Adhesives; Weather resistance
TBCHA	4-tert-Butylcyclohexyl Acrylate	84100-23-2	Coatings; Weather-resistant materials; Adhesives

DIFUNCTIONAL ACRYLATE MONOMERS

	Chemical name	CAS No.	Application
1,4-BDDA	1,4-Butanediol Diacrylate	1070-70-8	Crosslinking agent; Coatings; Adhesives
1,6-HDDA	1,6-Hexanediol Diacrylate	13048-33-4	Reactive diluent; UV-curable systems; Coatings
1,9-NDDA	1,9-Nonanediol Diacrylate	107481-28-7	Flexible coatings; Adhesives; Crosslinker
TCDDMDA	Tricyclodecanedimethanol Diacrylate	42594-17-2	High Tg coatings; UV systems; Low shrinkage
PTMG acrylate	Polytetramethylene Diacrylate	52277-33-5	Flexible coatings; Elastomers; Adhesives
PEG200 DA	Polyethylene Glycol 200 Diacrylate	26570-48-9	Hydrophilic coatings; Hydrogels; Adhesives
PEG400 DA	Polyethylene Glycol 400 Diacrylate	26570-48-9	Hydrogels; Coatings; Flexible systems
DPGDA	Di-propylene Glycol Diacrylate	57472-68-1	Reactive diluent; Coatings; Adhesives
NPGDA	Neopentyl Glycol Diacrylate	2223-82-7	Coatings; UV systems; Chemical resistance
NPG(PO)2DA	Neopentylglycol (PO)2 Diacrylate	84170-74-1	Flexible coatings; Adhesives; Reactive diluent
TPGDA	Tripropylene Glycol Diacrylate	42978-66-5	Reactive diluent; UV-curable systems; Coatings

MULTI-FUNCTIONAL ACRYLATE MONOMERS

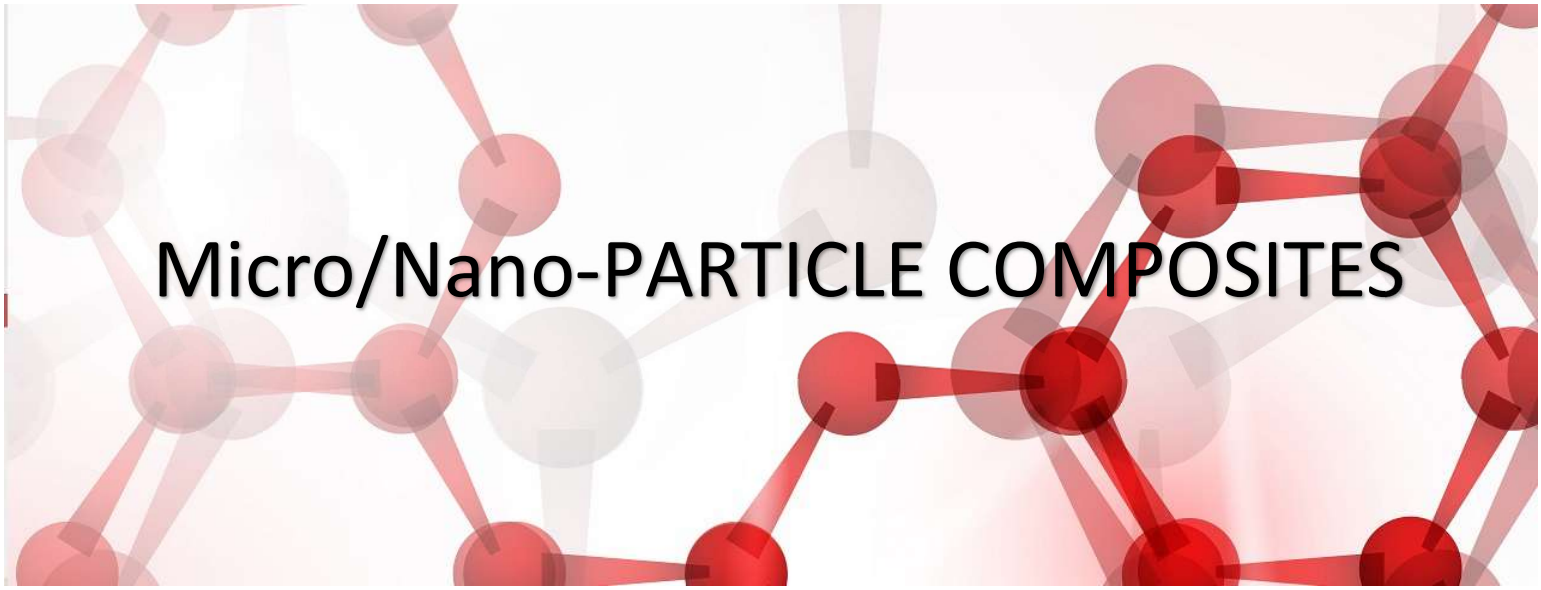
	Chemical Name	CAS No.	Application
TMPTA	Trimethylolpropane Triacrylate	15625-89-5	Crosslinking agent; UV-curable systems; Coatings
DPEPA	Di-pentaerythritol Polyacrylate	60506-81-2	High-performance coatings; UV systems; Crosslinker
A-DPH	Di-pentaerythritol Polyacrylate	29570-58-9	UV-curable systems; High crosslink density; Coatings
GPTA	Glyceryl (PO)3 Triacrylate	52408-84-1	Flexible coatings; Adhesives; Reactive diluent
PE(EO)nTTA	Pentaerythritol (EO)n tetraacrylate	51728-26-8	Hydrophilic coatings; UV systems; Crosslinker
PETIA	Pentaerythritol tri/tetra Acrylate	3524-68-3	Crosslinking agent; UV systems; Coatings
TMP(EO)3TA	Trimethylolpropane (EO)3 Triacrylate	28961-43-5	Flexible UV systems; Coatings; Adhesives
TMP(EO)4TA	Trimethylolpropane (EO)4 Triacrylate	28961-43-5	Flexible coatings; UV systems; Adhesives

MONOFUNCTIONAL METHACRYLATE MONOMERS

	Chemical name	CAS No.	Application
HEMA	2-Hydroxyethyl Methacrylate	868-77-9	Adhesion promoter; Coatings; Hydrogels
HPMA	2-Hydroxypropyl Methacrylate	27813-02-1	Coatings; Adhesives; Reactive diluent
AMA	Allyl Methacrylate	1996-5-9	Crosslinking agent; Co-polymers; Adhesives
BZMA	Benzyl Methacryate	2495-37-6	Coatings; Adhesives; High Tg monomer
CHMA	Cyclohexyl Methacrylate	101-3-9	Coatings; Hardness modifier; Adhesives
GMA	Glycidyl Methacrylate	106-91-2	Adhesion promoter; Reactive monomer; Epoxy modifier
IBOMA	Isobornyl Methacrylate	2495-37-6	Coatings; UV systems; High Tg monomer
ETMA	2-Ethoxyethyl Methacrylate	2370-60-0	Coatings; Adhesives; Reactive diluent
MTMA	2-Methoxyethyl Methacrylate	6976-93-8	Coatings; Adhesives; Reactive diluent
MPEGMA	Methoxy Polyethyleneglycol Methacrylate	26915-72-0	Dispersants; Coatings; Hydrophilic polymers
GMEC	Ethylene Carbonate Methacrylate	13818-44-5	Coatings; Adhesives; Specialty polymers
DCPMA	Dicyclopentanyl Methacrylate	34759-34-7	Coatings; Adhesives; Weather resistance

MULTI-FUNCTIONAL METHACRYLATE MONOMERS

	Chemical name	CAS No.	Application
EDMA	Ethylene Glycol Dimethacrylate	97-90-5	Crosslinking agent; Coatings; Adhesives
1,4 BDMA	1,4 Butanediol Dimethacrylate	2082-81-7	Crosslinking agent; Coatings; Adhesives
1,6 HDMA	1,6 Hexanediol Dimethacrylate	6606-59-3	Crosslinking agent; Coatings; Adhesives
701	2-Hydroxy-1,3-dimethacryloxypropane	1830-78-0	Crosslinking agent; Coatings; Adhesives
DEGDMA	Diethylene Glycol Dimethacrylate	2358-84-1	Crosslinking agent; Dental; Coatings
TEGDMA	Triethylene Glycol Dimethacrylate	109-16-0	Dental materials; Crosslinker; Adhesives
PEG200DMA	Polyethylene Glycol #200 Dimethacrylate	25852-47-5	Hydrogels; Coatings; Flexible systems
PEG400DMA	Polyethylene Glycol #400 Dimethacrylate	25852-47-5	Hydrogels; Coatings; Adhesives
PEG1000DMA	Polyethylene Glycol #1000 Dimethacrylate	25852-47-5	Hydrogels; Biomedical; Coatings
DCP	Tricyclodecane Dimethanol Dimethacrylate	43048-08-4	High Tg coatings; UV systems; Low shrinkage
BPE-10	Ethoxylated Bisphenol A Dimethacrylate	41637-38-1	Coatings; Adhesives; UV systems
TMPT	Trimethylolpropane Trimethacrylate	3290-92-4	Trimethylolpropane Trimethacrylate


Micro/Nano-PARTICLE COMPOSITES

Functional spherical fine particles based on developed through their unique polymerization technology. With the use of these properties, acrylic fine particles can be used for light diffusing agents, matting agents, anti-blocking agents for films, finish appearance enhancement agents, fluidity adjusting agents, and pore-foaming agents.

CROSS-LINKED PMMA MONO-DISPERSING PARTICLES

Item	Av. Particle Size um	Degree of Cross-linking
MX-80H3wT	0.8	High
MX-150	1.5	Standard
MX-180TA	1.8	Standard
MX-300	3.0	Standard
MX-500L	5	Standard
MX-1000	10	Standard
MX-1500H	15	High
MX-2000	20	Standard
MX-3000	30	Standard

CROSS-LINKED PMMA MIDDLE-DISPERSING PARTICLES

Item	Av. Particle Size um	Degree of Cross-linking
MZ-10HN	10	Ultrahigh
MZ-12H	12	Ultrahigh
MZ-16H	16	Ultrahigh
MZ-20HN	20	Ultrahigh
MZ-30	30	Ultrahigh

CROSS-LINKED PMMA WIDE-DISPERSING PARTICLES

Item	Av. Particle Size um	Degree of Cross-linking
MR-1HG	1	High
MR-2G	1	Standard
MR-5C	6	None
MR-7GC	6	Standard

CROSS-LINKED PMMA WIDE-DISPERSING HEAT RESISTANT PARTICLES

Item	Av. Particle Size um	Degree of Cross-linking
KMR-3TA	3	Ultrahigh

NON-CROSS-LINKED PMMA PARTICLES

Item	Av. Particle Size um	Electrostatic Propensity
MP-1441A	0.15	-
MP-2200	0.35	-
MP-1040A	0.4	-
MP-2741	0.4	-

CROSS-LINKED STYRENE MONO-DISPERSING PARTICLES

Item	Av. Particle Size um	Degree of Cross-linking
SX-130H	1.3	Standard
SX-350H	3.5	Standard
SX-500H	5	Standard

CROSS-LINKED STYRENE MONO-DISPERSING PARTICLES

Item	Av. Particle Size um	Degree of Cross-linking
SGP-70C	20	Low
SGP-150C	55	Standard

CROSS-LINKED STYRENE MONO-DISPERSING HEAT RESISTANT PARTICLES

Item	Av. Particle Size um	Degree of Cross-linking
KSR-3TA	3	Standard

Hollow Micro Beads

We have special hollow micro beads to offer strong thermal insulation in painting, coating, adhesives and so on. Particle sizes are very small, so reflectance on surface is high. FN-015E is made of organic raw material, so cost effective. Nano-Silica has high degree of transparency and and stronger heat resistance.

Item	Main material	Particle size	Specific gravity
FN-015E	Acrylonitrile	3-7um	0.11 ± 0.03
Nano-Silica(40nm)	Silica	30-40nm	Around 0.9
Nano-Silica(100nm)	SIlica	80-100nm	Around 0.8

Spherical Cellulose Beads

We have spherical cellulose beads made of wooden pulp. It is biodegradable not only in soil but also in water, so can be alternative to plastic microbeads. It can be used as additives for plastic/rubber, pore-foaming agents, matting agents for painting/ink and light diffusing agents.

Item	Particle size	Specific gravity
D-10	10-13um	0.7
D-5	7-10um	0.6
D-3	<6.5um	0.5

NANOPARTICLE DISPERSION

We can provide you with customizable dispersions with various kinds of nanoparticles, sizes, surface treatments, dispersible in a wide range of materials for Optical and Electronic material applications

- TiO^2-based nanoparticles
- $BaTiO^3$-based nanoparticles
- ZrO^2-based nanoparticles
- Silica-based nanoparticles (hollow)

BELLPEARL SERIES

BellPearl Series are non-toxic, high performance phenolic resins with a perfectly spherical shape. They are part of KOWA's Microsphere series which is characterized by high molecular weight and low cross-linking density.

S TYPE A: Hot melt self-curing type. Soluble in solvents. Used as binder resins for moldings. Also used as thermo-setting resin.
R TYPE: Does not melt with heat. Cured type. Insoluble in solvents. Used as reactive organic filler to, for instance, improve thermal resistance of matrixes.
C TYPE: Amorphous carbon particulates obtained by carbonizing R-type Bellpearl. Used as filler to improve electric conductivity and frictional properties of matrixes.


REACTIVE & FUNCTIONAL MATERIALS

ACRYLAMIDE & DERIVATIVES

	Chemical name	CAS No.	Application
	Acrylamide	79-06-1	
MBAA	N,N-Methylenebis Acrylamide	110-26-9	Crosslinking agent
NBMA	N-Buthoxymethyl Acrylamide	1852-16-0	Crosslinking agent; Paint; Adhesives
TBAA	N-t-Butyl Acrylamide	107-58-4	Reforming agent for resins
DMAA	N,N Dimethyl Acrylamide	2680-03-7	Coating; Adhesives; Contact lenses
DEAA	N,N Diethyl Acrylamide	2675-94-7	Coating; Adhesives; Textile finishing
NIPAM	N Isopropyl Acrylamide	2210-25-5	Hydrogels; Biomedicals
MVOX	5-Methyl-3-Vinyl-Oxazolidin-2-One	3395-98-0	Reactive diluent; Adhesion promoter

METHACRYLAMIDE & DERIVATIVES

	Chemical name	CAS No.	Application
	Methacrylamide	79-39-0	
NMMA	N-Methylol Methacrylamide	923-02-4	Crosslinking agent; Coatings; Textile
NIPMA	N Isopropyl Methacrylamide	13749-61-6	Coatings; Adhesives; Hydrogels

ACRYLATE DERIVATIVES

	Chemical name	CAS No.	Application
ATFAc	2-Propenoic acid,2-oxo-2-[(tetrahydro-2-furanyl)methoxy]ethyl ester	2630924-13-7	UV-Curable systems; Reactive diluent; Coatings
NVCL	N Vinylcaprolactam	2235-00-9	Coating; Adhesive; Reactive diluent
DCPOA	Dicyclopentenyloxyethyl Acrylate	65983-31-5	Coatings; Adhesives
EOMA	(3-Ethyl-3-oxetanyl)methyl Acrylate	41988-14-1	UV-Curable systems; Reactive diluent
VEEA	2-(2-Vinyloxyethoxy)ethyl Acrylate	86273-46-3	UV-Curable systems; Reactive diluent
TBCHA	4-t-Butylcyclohexyl Acrylate	84100-23-2	Coatings; Adhesives

METHACRYLATE DERIVATIVES

	Chemical name	CAS No.	Application
DCPOMA	Dicyclopentenyloxyethyl Methacrylate	66008-64-8	Coatings; Adhesives; Reactive diluent
TBCHMA	4-t-Butylcyclohexyl Methacrylate	46729-07-1	Acrylic resin
SMA	Sodium Methactylate	5536-61-8	Methacryloilzating agent
MEU	2-(Methacrylamido)propyltrimethyl-ammoniummethylsulfate	51441-65-7	Reforming agent for adhesive
4-MBPMA	4-Methacryloyloxybenzophenone	56467-43-7	Reforming agent for UV-Resin

VINYL ETHERS

	Chemical name	CAS No.	Application
ODVE	Octadecyl Vinyl Ether	930-02-9	Radiation curing systems; • Co-monomers • Crosslinking monomers • Building blocks • Reactive diluents Crosslinking agents for polymers; Intermediates; • Pharmaceuticals • Agrochemicals • Photochemicals • Other organic synthesis
CHVE	Cyclohexyl Vinyl Ether	2182-55-0	
CHMVE	1,4-Cyclohexanedimethanol Monovinyl Ether	114651-37-5	
CHDVE	1,4-Cyclohexanedimethanol divinyl Ether	mixture	
CHDVE	1,4-Cyclohexanedimethanol Divinyl Ether	17351-75-6	
ALLVE	Allyl Vinyl Ether	3917-15-5	
HEVE	2-Hydroxyethyl Vinyl Ether	764-48-7	
HBVE	4-Hydroxybutyl Vinyl Ether	17832-28-9	
HCHVE	4-Hydroxycyclohexyl Vinyl Ether	mixture	
HNVE	9-Hydroxycyclohexyl Vinyl Ether	150642-88-9	
BDVE	1,4-Butanediol Divinyl Ether	3891-33-6	
NDVE	1,9-Ninanediol Divinyl Ether	153626-59-6	
TMPTVE	Trimethylolpropane trivinyl Ether	57758-90-4	
PETTVE	Pentaerythritol tetravinyl Ether	757-46-0	

ALLYL ETHERS

	Chemical name	CAS No.	Application
AGE	Allyl Glycidiyl Ether	106-92-3	Reactive diluent; Adhesion promoter; Epoxy modifier; Coatings
Neoallyl T-20	Trimethylolpropane Diallyl Ether	682-09-7	Crosslinking agent; Coatings; Adhesives
Neoallyl P-30	Pentaerythritol Triallyl Ether	1471-17-6 2590-16-1 1471-18-7	Crosslinking agent; High-performance coatings; Adhesives
Neoallyl E-10	Glycerol Monoallyl Ether	123-34-2	Reactive diluent; Adhesion promoter; Coatings

ALLYL COMPOUNDS

	Chemical name	CAS No.	Application
DAP Monomer	Diallyl Phthalate Monomer	131-17-9	Crosslinking agent; Electrical materials; Molding compounds
DAP Prepolymer	Diallyl Phthalate Prepolymer	25053-15-0	Molding compounds; Electrical insulation; High-performance composites
DAP 100 monomer	Diallyl Isophthalate	1087-21-4	Crosslinking agent; Coatings; Adhesives
ISO DAP	Diallyl isophthalate prepolymer	25035-78-3	Molding compounds; Electrical insulation; Heat-resistant materials
DADMAC	Diallyl Dimethyl Ammonium Chloride	7398-69-8	Cationic monomer; Water treatment; Flocculants

Water Soluble Types

	Chemical name	Metal content	Acrylic content	pH (20□C)	CAS No.	Application
ZA30	Zinc diacrylate	9~10%	18~22%	5.0~6.0	14643-87-9	Resin modifier
MA35	Magnesium diacrylate	4.5~5.5%	30~32%	5.0~6.0	5698-98-6	Resin modifier
CA25	Calcium diacrylate	5~6%	18~21%	5.0~7.0	6292-01-9	Resin modifier
P-3	Aluminium triacrylate	7~9%	16~18%	1.0~2.0	15743-20-1	Resin modifier

Acrylates Powder Type

	Chemical name	Metal content	Acrylic content	Volatile	CAS No.	Application
SA	Sodium acrylate	20~24%	60~75%	1% min	7446-81-3	For special monomer and oligomer synthesis
PA	Potassium acrylate	31~36%	60~64%	1% min	10192-85-5	
ZDA-CP	Zinc diacrylate	31% min.	65% min.	0.5% min	14643-87-9	Rubber and resin modifier
RSS	Zinc diacrylate	27% min.	56% min.	0.5% min	14643-87-9	Rubber and resin modifier
R-MA	Magnesium diacrylate	12~15%	70~85%	1% min	5698-98-6	Rubber and resin modifier
R-CA	Calcium diacrylate	18~22%	60~75%	1% min	09.01.6292	Rubber and resin modifier

Methacrylates Powder Type

	Chemical name	Metal content	Methacrylic content	Volatile	CAS No.	Application
S-MA	Sodium methacrylate	19~21%	75~80%	1% min	5536-61-8	For special monomer and oligomer synthesis
P-MA	Potassium methacrylate	27~31%	66~70%	1% min	6900-35-2	
M-CP	Zinc dimethacrylate	26% min.	65% min.	0.5% min	13189-00-9	Rubber and resin modifier
R-60M	Zinc monomethacrylate	34~38%	53~57%	1% min	63451-47-8	Rubber and resin modifier
R-MMA	Magnesium dimethacrylate	11~14%	78~82%	1% min	7095-16-1	Rubber and resin modifier
R-CMA	Calcium dimethacrylate	15% min.	65% min	1% min	16809-88-4	Rubber and resin modifier
ND-MA	Neodymium trimethacrylate	36~37%	57.5~63.8%	1% min	79718-22-2	Resin modifier


EPOXY & CROSSLINKING SYSTEMS

Heat Durable and Environment Friendly Epoxy Resins

	Apperance	Epoxy Equivalent Weight (g/eq)	Viscosity (Pa.s/150!C)	Softeing Point	Characteristics
NC-3000	Slightly Yellow Solid Pellet	265~285	0.04~0.11	53~63	Low hydrolysable chlorine content; excellent heat resistance; low water absorption; high toughness
NC-3100	Slightly Yellow Solid Pellet	280~300	0.25~0.35	65~75	Excellent thermal decomposition; low water absorption; excellent toughness; low melt viscosity

Heat Durable Epoxy Resins

	Apperance	Epoxy Equivalent Weight (g/eq)	Viscosity (Pa.s/150!C)	Softeing Point	Characteristics
NC-7000L	Dark Brown Solid Pellet	223~238	0.50~1.00	83~93	Low hydrolysable chlorine content; High Tg; low water absorption; low coefficient of thermal expansion
EPPN-501H	Slightly Brown Solid Pellet	162~172	0.05~0.11	51~57	Low hydrolysable chlorine content; High Tg
EOCN-1020	Slightly Yellow Solid Pellet	191~207	0.06~1.20	52.5~82	Low hydrolysable chlorine content. excellent heat resistance; low water absorption; flexual strength

Liquid Type Epoxy Resins

	Apperance	Epoxy Equivalent Weight (g/eq)	Viscosity (Pa.s/150!C)	Characteristics
GAN	Transparent Liquid Slightly Yellow	115~135	0.10~0.16	Low viscosity liquid
GOT	Transparent Liquid Slightly Yellow	125~145	0.030~0.080	Low viscosity liquid

High Purity Liquid Type Epoxy Resin

	Apperance	Epoxy Equivalent Weight (g/eq)	Viscosity (Pa.s/150!C)	Characteristics
RE-303S-L	Slightly Yellow Transparent Liiquid	162~172	4.50~7.00	High purity low viscosity liquid
RE-310S	Slightly Yellow Transparent Liiquid	175~190	12.0~18.0	High purity low viscosity liquid

GLYCIDIL ETHER

	Flash Point (°C)	Viscosity (mPa.s/25°C)	Epoxy Equivalent of resin	Characteristics	CAS No.
100MF	210	108~168	135~145	High crosslinking density	30499-70-8
3002	265<	3500~5500	310~410	Good flexibility	933999-83-8
4000	208	1500~3500	208~245	Alicyclic	30589-72-3
M-1230	149	5~15	295~320	Low viscosity; Low irritative	933999-87-2

CURING AGENTS

The “Fujicure-series” are modified amine compounds supplied in powder form, solid at ambient temperature and latent curing agent which is activated by heat. The mixture with epoxy resin has long-term storage stability at ambient temperature, curability at low temperature (80-degree Celsius or higher) and has excellent adhesiveness. It can also be used as a curing accelerator for Dicyandiamide (DICY) and Acid Anhydride and can significantly reduce the curing temperature.

	Apperance	Softening point (°C)	Amine value	Average particle size D50(um)	Characteristics
Fujicure FXR-1020	White	120~130	245~255	4~6	Low temperature curing (80°C)
Fujicure FXR-1030	White	135~145	145~155	4~6	Available to mix with Diluents Curing at >100°C
Fujicure FXR-1081	White	115~125	110~120	4~6	Fast curing improves from FXR-1020 Achieve strength at 70°C
Fujicure FXR-1061	White	90~110	140~160	4~6	Low temperature and fast curing, Achieve strength at 60°C
Fujicure FXR-1121	Light yellow	128~138	165~185	4~6	Low temperature curing, High TG, Good storage stability
Fujicure FXR-1171	Light yellow	105~115	180~190	4~6	Small dosage (PHR), High TG

DICYANDIAMIDE

Name	Apperance	Purity	Molecular Weight	Specific Gravity	APHA
DCD/ DICY	White, fine-crystalline powder	99,5%	84.08	1.404 g/cm-^{3}	40

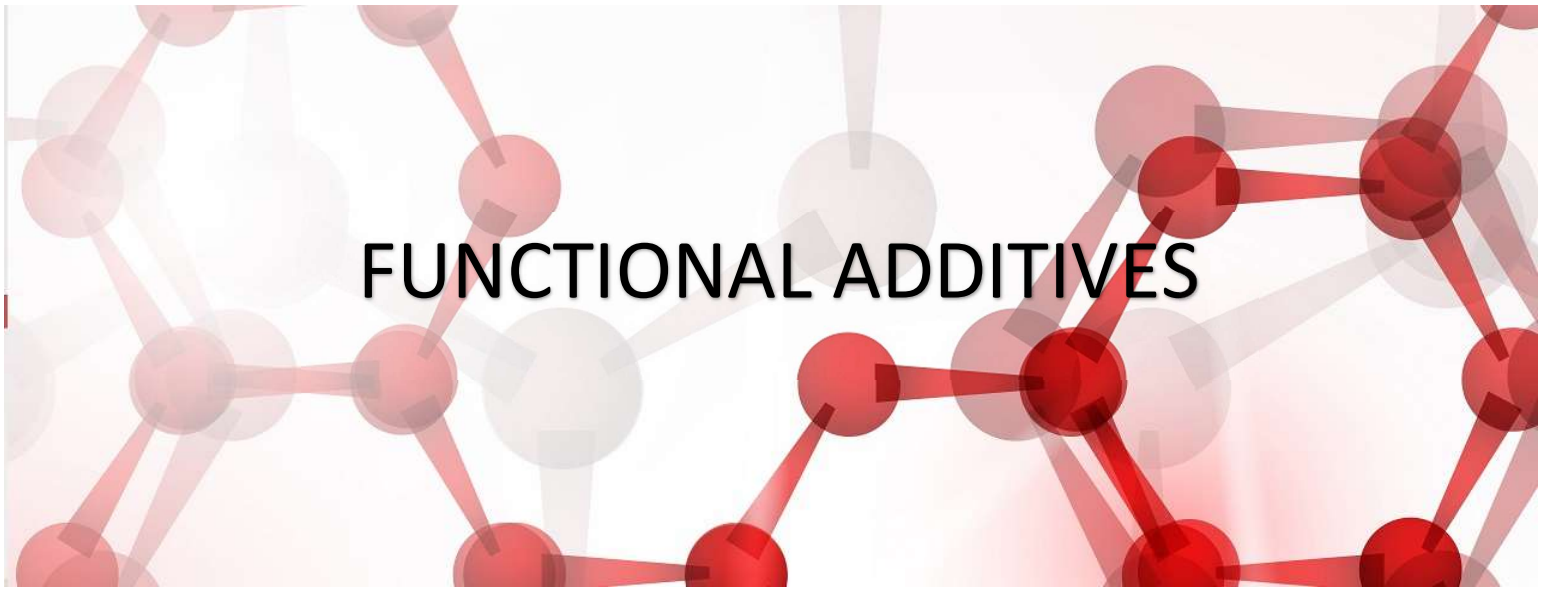
ACID ANHYDRIDES

Name	Appearance	Softening Point	Color (Hazen)	CAS No.
HHPA	White, glassily solid	34min.	50 max	85-42-7
THPA	White, flake	100 min.	100 max	85-43-8
MH-700	Clear liquid	-15 max.	50 max	19438-60-9
SA	White, tablet	118-121	50 max.	108-30-5

Duranate is HDI polyisocyanate for applications ranging from paints and coatings to adhesives, films, inks, resins, and other fields. We focus on Low viscosity grades for urethane resin.

LOW VISCOCITY GRADE (Trimer Type)

Grade	Solid Content [wt/%]	NCO Content [wt/%]	Viscocity [25°C, mPas]	Viscocity [23°C, mPas]
Fine TMA-100	100	23,0	1,050	1,200
Fine TLA-100	100	23,3	500	570
Fine TUL-100	100	23,0	300	340


FUNCTIONAL ADDITIVES

PHOSPHATES

	Chemical name	CAS No.	Application
JP-506H	Butoxyethyl acid phosohate	39454-62-1	Surfactant; Coatings; Corrosion inhibitor
JP-518-O	Oleyl Acid Phosphate	37310-83-1	Lubricant; Surfactant; Metal treatment
LB-508	2-Ethylhexyl acid phosphate	12645-31-7	Plasticizer; Coatings; Corrosion inhibitor
LB-58	Di-2-ethylhexyl acid phosphate	298-07-7	Plasticizer; Lubricant; Extraction agent
EGAP	Ethyleneglycol acid phosphate	52012-13-2	Coatings; Adhesion promoter; Surface treatment
JPA-514	2-Hydroxyethylmethacrylate acid phosphate	52628-03-2	Reactive monomer; Adhesion promoter; Coatings; Adhesives
	Tris-Acryloyloxyethyl Phosphate	35057-49-9	Crosslinking agent; UV-curable systems; Flame retardant coatings
	Tris-Methacryloylxyethyl Phospate	15458-78-0	Crosslinking agent; UV-curable systems; Adhesion promoter

SULFONATE

	Chemical name	CAS No.	Description
SMAS	Sodium Methallyl Sulfonate	1561-92-8	Reactive co-monomer for acrylic fiber, reforming monomer for various polymers
ATBS	Acrylamide Tertiary Butyl Sulfonic Acid (2-Acrylamido-2-Methyl Propane Sulfonic Acid)	15214-89-8	
ATBS Sodium salt	Sodium 2-acrylamide-2-methyl-1-propane sulfonate	5165-97-9	mixture with Water

STEARATES

Chemical name	CAS No.	Application
Magnesium Stearate	557-04-0	Excipient for capsule and tablet. Coating.
Calcium Stearate	1592-23-0	Lubricant for capsule.

Additive for Concrete

Chemical name	CAS No.	Application
CHUPOL AFK-2	Confidential	Defoamer of Concrete.

Photo Acid Generator (PAG)

Photo Acid Generator is used for Cationic curable ink/adhesive and semiconductor industry and ours contains fewer dimers (impurities) than market.

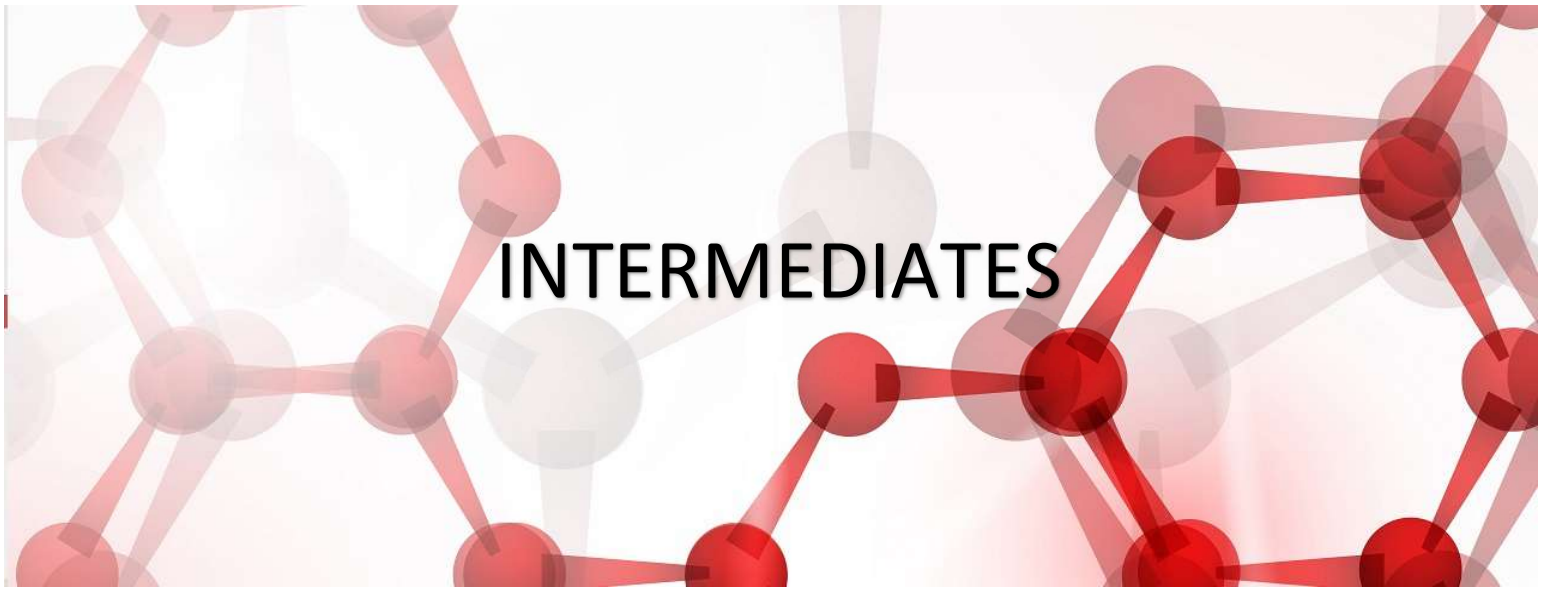
	Anion	CAS Number	MW	Appearance	Color
CPI-100P	PF6	68156-13-8	517	Liquid	Light yellow-Yellow
CPI-110P	PF6	68156-13-8	517	Powder	White
CPI-101A	SbF6	71449-78-0	607	Liquid	Light yellow
IK-1	PF3(C2F5)3	1245634-39-2	782	Powder	White-Light yellow
NA-CS1	Camphasulfonic acid		500	Powder	White-Light brown

Photo Initiator

	Product name	CAS Number
Phosphine Oxides	TPO-L	75980-60-8
	1819	162881-26-7
α-Amino Ketones	369	119313-12-1
	379	119344-86-4

GLYCOL ETHERS

	Chemical name	CAS No.	Application
iPG	Iso-Propyl Glycol	109-59-1	Solvent; Coatings; Cleaning agents
BTG	Butyl Tri Glycol	1559-34-8	Solvent; Coalescing agent; Coatings
iBG	Iso-Butyl Glycol	628-81-9	Solvent; Coatings; Cleaning agents
HeG	Hexyl Glycol	112-25-4	Coalescing agent; Coatings; Inks
EHG	2-Ethyl Hexyl Glycol	1559-35-9	Coalescing agent; Low-VOC coatings; Additive
AG	Allyl Glycol	111-45-5	Reactive diluent; Adhesion promoter; Coatings
PhG	Phenyl Glycol	112-99-6	High-boiling solvent; Coatings; Specialty formulations
BzG	Benzyl Glycol	111-46-6	Solvent; Coatings; Plasticizer
MFG	Methyl Propylene Glycol	107-98-2	Solvent; Coatings; Inks
PFG	Propyl Propylene Glycol	1569-01-3	Solvent; Coatings; Cleaning agents
BFG	Butyl Propylene Glycol	5131-66-8	Solvent; Coatings; Cleaning agents


INTERMEDIATES

CARBOXYLIC ACIDS

	Chemical name	Appearance	Purity (%)	Melting Point (°C)	CAS No.
TH-W	4-cyclohexene-1,2-dicarboxylic acid	White, powder	99 min	163~171	88-98-2
CHDA	1,4-cyclohexanedicarboxylic acid	White, powder	99 min	185 min.	1076-97-7

THIOCARBOXYLIC ACIDS

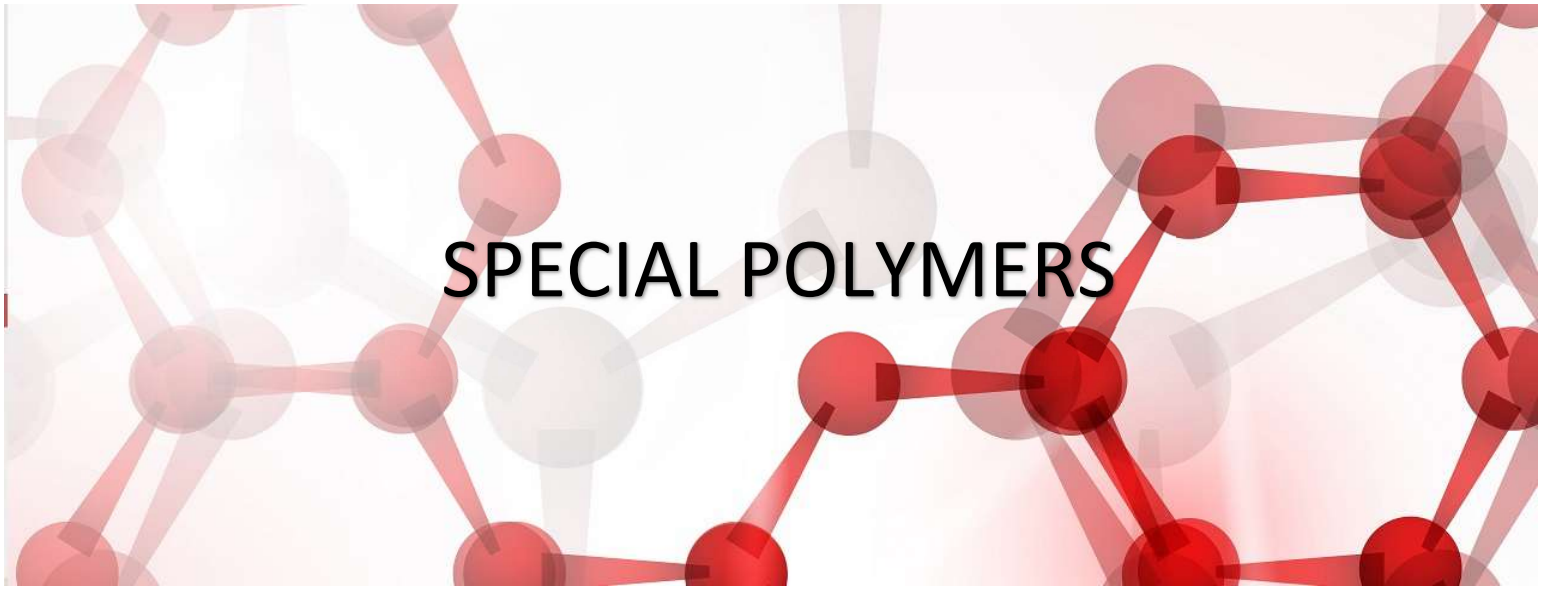
	Chemical name	CAS No.	Application
TDPA	3,3' -Thiodipropionic Acid	111-17-1	Antioxidant intermediate; Polymer stabilizer; Additive
DTDPA	Dithiodipropionic Acid	1119-62-6	Polymer stabilizer; Antioxidant; Intermediate
BMPA	β-Mercaptopropionic Acid	107-96-0	Chain transfer agent; Adhesion promoter; Cement additives; Polycarbonate processing
PEMP	Pentaerithritol tetrakis-(3-mercaptopropionate)	7575-23-7	Crosslinking agent; UV-curable systems; Thiol-ene systems
DPMP	[Dipentaerythritol-hexakis-(3-mercaptopropionate)]	25359-71-1	High-functionality crosslinker; UV-curable systems; Coatings
TMMP	[Trimethylolpropane-tris-(3-mercaptopropionate)]	33007-83-9	Crosslinking agent; UV-curable systems; Adhesives
TEMPIC	Tris[2-(3-mercatopropionyloxy)-ethyl]Isocyanurate	36196-44-8	High-performance crosslinker; UV-curable systems; Coatings

CHAIN TRANSFER AGENT

	Chemical name	CAS No.	Application
AMSD	α Methyl Styrene Dimer	6362-80-7	Chain transfer agent; Viscosity modifier; Synthetic intermediate

1,2 ALKANEDIOL

Chemical name	CAS No.	Application
1,2 Butanediol	584-03-2	Ink jet ink
1,2 Hexanediol	6920-22-5	Ink jet ink; cosmetic preservative
1,2 Octanediol	1117-86-8	Ink jet ink



SPECIAL POLYMERS

POLYETHELENE OXIDE

ALKOX High molecular weight (100,000 - 8,000,000) Polyethylene Glycol. Viscosity thickener for paints and pigments. Dispersing agents for fabrics, coatings and fluorescent lamps.

Grade	Mol. Weight [*1000]	Viscosity [mPas]	Conc. [%]
R-150	100-170	80-200	10
R-400	180-250	400-800	10
R-1000	250-300	2000-4000	10
E-20	300-400	20-40	2
E-30	400-500	40-100	2
E-40	500-600	100-200	2
E-45	650-800	300-600	2
E-60	1000-1200	2000-4000	2
E-75	2000-2500	40-70	0,5
E-100	2500-3000	90-105	0,5
E-160	3500-4000	150-170	0,5
E-240	4500-5000	200-250	0,5
E-300	6000-7000	300-350	0,5

1,2 POLYBUDATIENE

Liquid polybutadiene derived from butadiene using living anionic polymerization technology. It has excellent water resistance, chemical resistance, electrical properties, mechanical strength, and heat resistance, and can be used in a wide range of applications such as rubber modifiers, adhesives, and paints.

	Terminal	Reacted 1,2-Vinyl	Mn	1,2-Vinyl (%)	Viscosity (P@45°C)	Tg (°C)
B-1000	**H**	**None**	**1200**	**85**	**10**	**-44**
B-2000			**2100**	**88**	**65**	**-29**
B-3000			**3200**	**92**	**210**	**-21**
BI-2000	**H**	**Hydrogenated**	**2200**	**<7**	**60**	**-51**
BI-3000			**3300**	**<7**	**180**	**-44**
G-1000	**OH**	**None**	**1400**	**85**	**75**	**-25**
G-2000			**1900**	**88**	**140**	**-19**
G-3000			**3000**	**92**	**310**	**-15**
GI-1000	**OH**	**Hydrogenated**	**1500**	**<7**	**105**	**-44**
GI-2000			**2000**	**<7**	**165**	**-42**
GI-3000			**3100**	**<7**	**315**	**-37**
TEAI-1000	**Urethane acrylate**	**Hydrogenated**	**2000**	**<7**	**3000**	**-14**
TE-2000	**Urethane Acrylate**	**None**	**2500**	**88**	**1500**	**-9**
JP-100	**H**	**Epoxidized**	**1300**	**>70**	**220**	**-16**
JP-200			**2200**	**>70**	**1000**	**-7**

LIQUID ACRYLIC POLYMERS

The unique Liquid Acrylic Polymer series which are non-solvent functional and reactive acrylic polymers of low-molecular weight that has come out of molecular weight control technology. Due to environmentally sound characteristics as non-solvent liquid polymers and excellent normal-temperature fluidity, they are recommended as a plasticizer replacement, modifying agent and additive agent. Following grades are recommended for certain application:

DISPERSE AGENT

High filling capabilities for pigments or other fillers

	Type	Monomer	Func. group	Amount	Tg [°c]	Solubility parameter	Mol. Weight	Viscosity [mpas,25°c]
UMM-1001	MONOFUNCTIONAL HYDOXY	MA	OH	OHV=94±1	-46	10.3	$1.0X10^3$	6500-9500
UT-1001	DIFUNCTIONAL HYDROXY	2EHA	OH	OHV=58 ±3	-80	10.2	$3.5X10^3$	2000-4000
CB-3060	MULTIFUNCTIONAL CARBOXYL	HEA	COOH	AV=60±1	-80	9.5	$3.0X10^3$	800-1200
CB-3098	MULTIFUNCTIONAL CARBOXYL	2EHA	COOH	AV=98±1	-71	9.6	$3.0X10^3$	15000-20000
CBB-3098	MULTIFUNCTIONAL CARBOXYL	BA	COOH	AV=98±1	-55	10.6	$3.0X10^3$	20000-30000

ALKOXYSILYL GROUP

	Type	Monomer	Func. group	Amount	Mol. Weight	Viscosity [mpas, 25°c]	Non volatile content 105°c
NE-1000	Monofunctional Alkoxysilyl	BA	Si(OCH3)3	Trimethoxysilyl =7±1	$3.0x10^3$	1000-1500	>98%
NE-3000	Multifunctional Alkoxysilyl	MMA	Si(OCH3)3	Trimethoxysilyl =7±1	$5.0x10^3$	1500-2500	70%

COOH-GROUP [MODIFIER FOR EPOXY RESIN]

	Type	Monomer	Func. Group	Amount	Tg [°c]	Solubility parameter	Mol. Weight	Viscosity [mpas,25°c]	Non volatile content 105°c
CB-3060	Multifunctional Carboxyl	HEA	COOH	AV=60±1	-80	9.5	$3.0x10^3$	800-1200	>98%
CB-3098	Multifunctional Carboxyl	2EHA	COOH	AV=98±1	-71	9.6	$3.0x10^3$	15000-20000	>98%
CBB-3098	Multifunctional Carboxyl	BA	COOH	AV=98±1	-55	10.6	$3.0x10^3$	20000-30000	>98%

COOH-GROUP [RESIN FOR POLYMER ALLOY]

CBB-3098 & K-009 are an efficient replacement for butadiene rubber

	Type	Monomer	Func. Group	Amount	Tg [°c]	Solubility parameter	Mol. Weight	Viscosity [mpas,25°c]	Non volatile content 105°c
CBB-3098	Multifunctional Carboxyl	BA	COOH	AV=98±1	-55	10.6	$3.0x10^3$	20000-30000	>98%
K-009	Non functional	MMA			30		$25x10^4$	Solid	100%

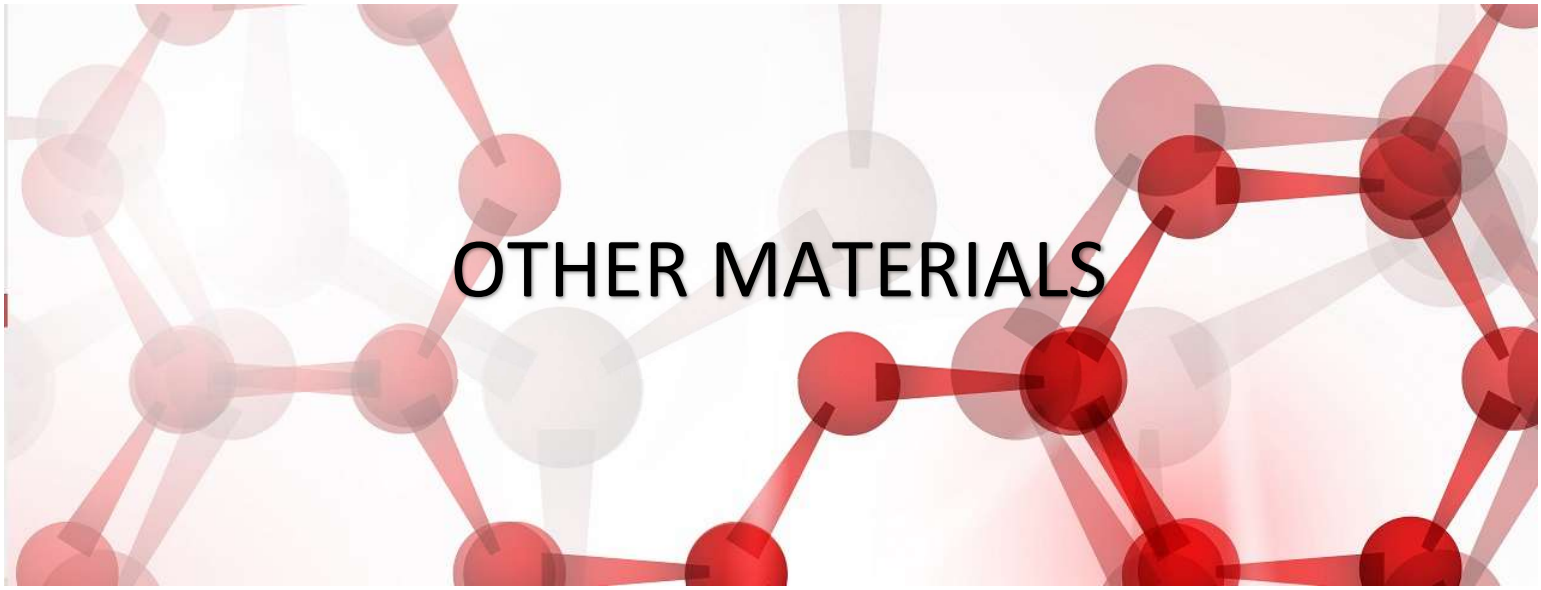
OH-GROUP [URETHANE RESIN]

UT-1001 enhances light and heat resistance by crosslinking with isocyanates.

	Type	Monomer	Func. Group	Amount	Tg [°c]	Solubility parameter	Mol. Weight	Viscosity [mpas,25°c]
UT-1001	Difunctional Hydroxy	2EHA	OH	OHV=58 ±3	-80	10.2	$3.5x10^3$	2000-4000

WATER-SOLUBLE POLYACRYLATES

JURYMER AT AND ET SERIES are the aqueous solutions of polyacrylic esters used as film-forming agents for eyeliners, eye shadows, mascara and water nail enamel, as well as pigment dispersants and binders. These products are self-emulsifying and include no surfactants or emulsifiers.


OTHER MATERIALS

Philippine-Japan Active Carbon Corp. (PJAC), established in 1972 and 100% owned by Kowa Company, is a leading manufacturer of granular coconut shell based steam-activated carbon.

- Available from mesh size
- High adsorption capacity, high hardness and low ash content.
- Consistent quality from batch to batch
- pH 6-8 grades produced by acid wash process
- Custom-made products
- PJAC plant certifications include ISO 9001, NSF 42 and NSF 61.

ACID WASCHED ACTIVATED CARBON

Grade name	Mesh	Iodine Adsorption
PJA2050F-1100	20 x 50	1100 mg/g Min
PJA3070F-1100	30 x 70	1100 mg/g Min
PJA3580F-1100	35 x 80	1100 mg/g Min

GAS SERIES

PJAC G-Series is characterized by high adsorption capacity, high hardness characteristics and low pressure drop. It is excellent in applications such as catalyst support, solvent recovery, air purification and the adsorption of various kinds of gases.

WATER SERIES GW

Grade name	Mesh	Iodine Adsorption
PJ820W	8 x 20	1000 Min or 1100 Min
PJ830W	8 x 30	1000 Min or 1100 Min
PJ1230W	12 x 30	1000 Min or 1100 Min
PJ1240W	12 x 40	1000 Min or 1100 Min

Zeomic is the world's first silver-base inorganic antimicrobial agent commercialized by Sinanen Zeomic in 1984. Compared to organic antimicrobial agents, Zeomic boasts excellent safety, sustainability and heat resistance

GRADE	PLASTIC							PAINT			FIBER	
	COLORED				TRANSPARENT		FILM	Solvent	Water	Powder	Knead	Dip or Spray
	PP	ABS	PVC	PE	GPPS	PC	PP					
DAW502	○	◎	◎									
XLJ50D	◎	○	◎									
IM10D-L	○	○			○	◎				○		
AW10D/AJ10D	○	○			AW	◎	○			◎	◎	
AW10N/AJ10N		○				◎	○	◎	◎			
EAW502			◎									
AC10D			○					◎	◎			

◎ Good Removal Performance ○ Moderate Removal Performance △ Poor Removal Performance — Not Effective

Physical Properties	
Appearance	White fine powder,odorless
Absolute specific gravity	2.1(-)
Bulk specific gravity	0.4 - 0.8(g/cm3)
Heat resistance	800(˚C)
Acid resistance	pH3
Alkali resistance	pH13
Mean diameter	2 - 3μm (general grade)
pH (1wt% water)	8.0±1.0 (*insoluble in water)

ANTI-ODOR AGENT

Purgelite is a deodorant and adsorbent that can remove all kinds of general household odors using our conventional zeolite synthesis technology and ion exchange technology. It is mainly used in the medical, nursing care, and sanitation fields because it can remove odors such as sweat, garbage, and excretion.
It can be used not only for odor control in the environment, but also for odor control emitted from the material itself (substrate odor).

It's main application are:

- Automotive Interior Materials
- Textile Products
- Plastic Resin Containers
- Interior Construction Materials
- Filtration Systems
- Hygiene Products

Category	Substance	ZH	CZU	3MH	7MH	9MH	3KZ	NKS-ARP
Organic Acids	Acetic Acid	◎	◎	◎	◎	◎	◎	—
	Isovaleric Acid	◎	◎	◎	◎	◎	◎	—
Amines	Ammonia	◎	◎	—	○	△	△	—
	Trimethylamine	○	○	◎	◎	◎	◎	—
	Pyridine	△	◎	◎	◎	◎	◎	—
Sulfur Compounds	Hydrogen Sulfide	◎	◎	—	—	—	—	—
	Methylmercaptan	—	◎	—	—	—	—	—
Aldehydes & Ketones	Formaldehyde	—	—	△	—	—	△	◎
	Acetaldehyde	—	—	△	—	—	◎	◎
	Diacetyl	—	○	◎	◎	◎	◎	◎
	Nonenal	—	◎	◎	◎	◎	◎	◎
Hydrophobic Materials	Toluene	—	○	◎	◎	◎	◎	—
	Xylene	—	○	○	◎	◎	○	—
	Hexane	—	○	◎	○	○	◎	—
	Indole	△	◎	◎	◎	◎	◎	—

◎ Good Removal Performance ○ Moderate Removal Performance △ Poor Removal Performance — Not Effective

Would you like more information about a specific product, or haven't you found what you're looking for? Please send your request to:

CONTACT US

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