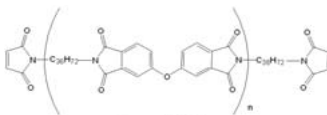
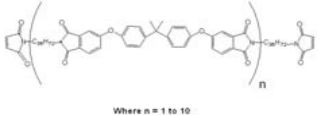
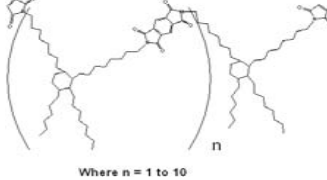
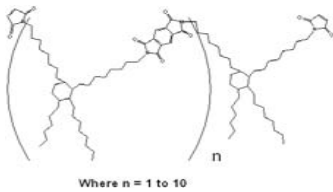
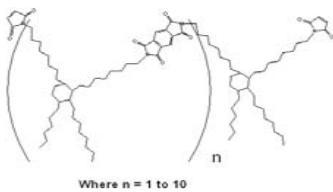
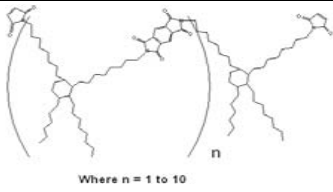
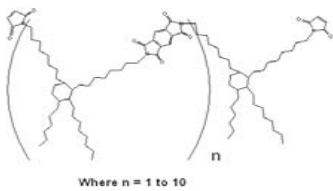
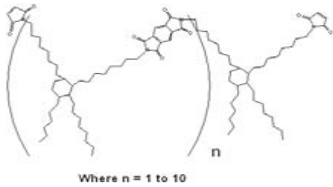
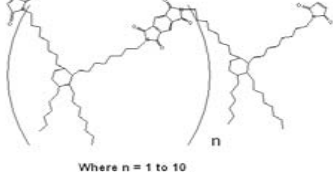
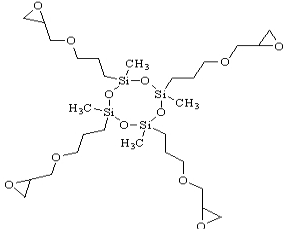
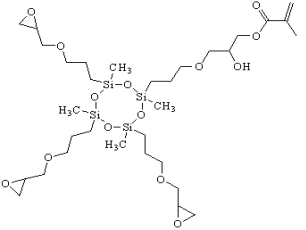


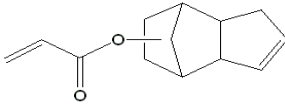
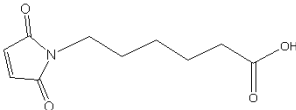
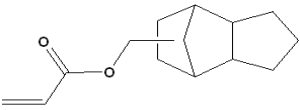
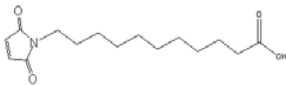
## PRODUCT SELECTOR GUIDE

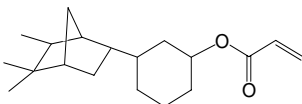
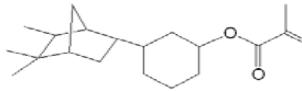
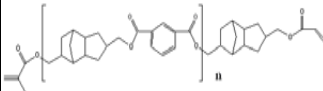

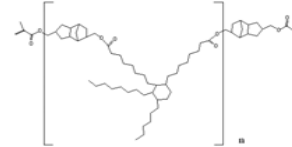
P/N	PRODUCT	CAS NO. TSCA Listed (Y/N)	DESCRIPTION	STRUCTURE**	FEATURES	APPEARANCE	VISCOSITY (25deg C)	SUGGESTED APPLICATIONS	
<b>FUNCTIONAL ADDITIVES</b>									
						Room Temp	cP		
A6165	A-6165 Soluble Pd Itaconate (SPdI)	1151654-51-1 (Y)	A soluble additive that on addition to a conductive adhesive formulation can significantly decrease the volume resistivity of the cured material.	Unavailable	<ul style="list-style-type: none"> <li>-Improves electrical conductivity in metal filled conductive paste formulations.</li> <li>-Soluble in most resin systems.</li> <li>-May improve the thermal conductivity in some formulations.</li> </ul>	Dark Brown Viscous Liquid	--	Increase electrical conductivity of resin system	
<b>IMIDE-EXTENDED BISMALIMIDES</b>									
						Room Temp	cP		
R1203	BMI-1500 (Liquid)	1290041-56-3 In Process	An amorphous, low molecular weight bismaleimide oligomer that exhibits good adhesion to a variety of substrates.	 <p style="text-align: center;">Representative Structure Where n = 1 - 10</p>	<ul style="list-style-type: none"> <li>-Soluble in many reactive diluents</li> <li>-Hydrophobic</li> <li>-Superior thermal stability</li> <li>-High adhesion to various substrates</li> </ul>	Amber, Viscous Liquid	20,000 ± 10,000 (60deg C)	<ul style="list-style-type: none"> <li>-Film adhesives</li> <li>-Pre-applied adhesives</li> <li>-Adhesion to metal</li> </ul>	
R1191	BMI-1700 (Liquid)	1224691-98-8 (Y)	An amorphous, low molecular weight bismaleimide oligomer that exhibits good adhesion to a variety of substrates.	 <p style="text-align: center;">Where n = 1 to 10</p>	<ul style="list-style-type: none"> <li>-Soluble in many reactive diluents</li> <li>-Hydrophobic</li> <li>-Superior thermal stability</li> <li>-High adhesion to various substrates</li> </ul>	Amber, High Viscosity Liquid	30,000 ± 10,000 (60deg C)	<ul style="list-style-type: none"> <li>-Film adhesives</li> <li>-Pre-applied adhesives</li> <li>-Adhesion to metal</li> </ul>	
R1130	BMI-3000 (Powder)	921213-77-6 (Y)	Bismaleimide oligomer that exhibits excellent flexibility and, on cure, forms very tough, hydrophobic polyimides.	 <p style="text-align: center;">Where n = 1 to 10</p>	<ul style="list-style-type: none"> <li>-Toughener</li> <li>-Hydrophobic</li> <li>-High adhesion*</li> <li>-Superior thermal stability</li> </ul>	Light Yellow Powder	N/A	<ul style="list-style-type: none"> <li>-Film adhesives</li> <li>-Pre-applied adhesives</li> <li>-Adhesion to metal</li> </ul>	

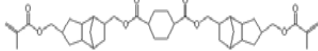
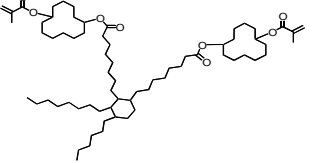
P/N	PRODUCT	CAS NO. TSCA Listed (Y/N)	DESCRIPTION	STRUCTURE**	FEATURES	APPEARANCE	VISCOSITY (25deg C)	SUGGESTED APPLICATIONS
R1177	<b>BMI-3000</b> (50% Toluene)	921213-77-6 (Y)	Bismaleimide oligomer that exhibits excellent flexibility and, on cure, forms very tough, hydrophobic polyimides.	 Where n = 1 to 10	<ul style="list-style-type: none"> <li>·Toughener</li> <li>·Hydrophobic</li> <li>·High adhesion*</li> <li>·Superior thermal stability</li> </ul>	Dark Brown Liquid	200	<ul style="list-style-type: none"> <li>·Film adhesives</li> <li>·Pre-applied adhesives</li> <li>·Adhesion to metal</li> </ul>
R1090	<b>BMI-3000</b> (Gel)	921213-77-6 (Y)	Bismaleimide oligomer that exhibits excellent flexibility and, on cure, forms very tough, hydrophobic polyimides.	 Where n = 1 to 10	<ul style="list-style-type: none"> <li>·Toughener</li> <li>·Hydrophobic</li> <li>·High adhesion*</li> <li>·Superior thermal stability</li> </ul>	Red-Amber Gel	N/A	<ul style="list-style-type: none"> <li>·Film adhesives</li> <li>·Pre-applied adhesives</li> <li>·Adhesion to metal</li> </ul>
R1193	<b>BMI-4500</b> Polyamide-imide oligomer	1242162-29-3 (Y)	A medium molecular weight maleimide terminated polyamide-oligomer with a low melting point.	Available upon request	<ul style="list-style-type: none"> <li>·Very hydrophobic</li> <li>·Good thermal stability</li> <li>·Good adhesion*</li> <li>·Good film properties</li> </ul>	Brown Powder	N/A	<ul style="list-style-type: none"> <li>·Film adhesives</li> <li>·Pre-applied adhesives</li> <li>·Adhesion to metal</li> </ul>
R1171-P	<b>BMI-5000</b> (Powder)	921213-77-6 (Y)	An imide-extended bismaleimide oligomer that exhibits excellent toughness in the cured state with intermediate cross-link density.	 Where n = 1 to 10	<ul style="list-style-type: none"> <li>·Low cross-link density</li> <li>·Non-tacky</li> <li>·Film-forming</li> <li>·Maleimide functional oligomer</li> <li>·Cures to a tough thermoset</li> <li>·Additive to enhance toughness in thermoset compositions</li> </ul>	Light Yellow Powder	N/A	<ul style="list-style-type: none"> <li>·Film adhesives</li> <li>·Thermally resistant adhesives</li> </ul>
R1171-T	<b>BMI-5000</b> (50% Toluene)	921213-77-6 (Y)	An imide-extended bismaleimide oligomer that exhibits excellent toughness in the cured state with an intermediate cross-link density.	 Where n = 1 to 10	<ul style="list-style-type: none"> <li>·Low cross-link density</li> <li>·Non-tacky</li> <li>·Film-forming</li> <li>·Maleimide functional oligomer</li> <li>·Cures to a tough thermoset</li> <li>·Additive to enhance toughness in thermoset compositions</li> </ul>	Dark Brown Liquid	1,000	<ul style="list-style-type: none"> <li>·Film adhesives</li> <li>·Thermally resistant adhesives</li> </ul>

P/N	PRODUCT	CAS NO. TSCA Listed (Y/N)	DESCRIPTION	STRUCTURE**	FEATURES	APPEARANCE	VISCOSITY (25deg C)	SUGGESTED APPLICATIONS
R1176-P	BMI-9000 (Powder)	921213-77-6 (Y)	An imide-extended bismaleimide oligomer that exhibits excellent toughness in the cured stated with a relatively low cross-link density.		<ul style="list-style-type: none"> <li>-Low cross-link density</li> <li>-Non-tacky</li> <li>-Film-forming</li> <li>-Maleimide functional oligomer</li> <li>-Cures to a tough thermoset</li> <li>-Additive to enhance toughness in thermoset compositions</li> </ul>	Light Yellow Powder	N/A	<ul style="list-style-type: none"> <li>-Film adhesives</li> <li>-Thermally resistant adhesives</li> </ul>
R1176-T	BMI-9000 (50% Toluene)	921213-77-6 (Y)	An imide-extended bismaleimide oligomer that exhibits excellent toughness in the cured stated with a relatively low cross-link density.		<ul style="list-style-type: none"> <li>-Low cross-link density</li> <li>-Non-tacky</li> <li>-Film-forming</li> <li>-Maleimide functional oligomer</li> <li>-Cures to a tough thermoset</li> <li>-Additive to enhance toughness in thermoset compositions</li> </ul>	Dark Brown Liquid	500	<ul style="list-style-type: none"> <li>-Film adhesives</li> <li>-Thermally resistant adhesives</li> </ul>
<b>CYCLOSILOXANE EPOXY HYBRIDS</b>						<b>Room Temp</b>	<b>cP</b>	
R1163	CS-697 Polyglycidyl Ether Cyclosiloxane Monomer	257284-60-9 (Y)	A polyglycidyl ether cyclosiloxane monomer.  <b>NOT AVAILABLE IN JAPAN</b>		<ul style="list-style-type: none"> <li>-Multifunctional</li> <li>-UV curable</li> <li>-Low chloride</li> <li>-Low viscosity</li> <li>-Colorless</li> </ul>	Colorless Liquid	200	-UV curable additive
R1116	CS-783 Methacrylate Epoxy Cyclosiloxane	921214-21-3 (Y)	A methacrylate epoxy functional hybrid cyclosiloxane monomer.		<ul style="list-style-type: none"> <li>-Dual cure mechanism</li> <li>-Multifunctional</li> <li>-UV curable</li> <li>-Low chloride</li> <li>-Low viscosity</li> </ul>	Yellow Liquid	250	<ul style="list-style-type: none"> <li>-Hybrid cures</li> <li>-UV cures</li> <li>-B-Stageable adhesives</li> </ul>

P/N	PRODUCT	CAS NO. TSCA Listed (Y/N)	DESCRIPTION	STRUCTURE**	FEATURES	APPEARANCE	VISCOSITY (25deg C)	SUGGESTED APPLICATIONS
<b>PHENYL ESTER EPOXY CURATIVES</b>							Room Temp	cP
R1146	<b>EC-234</b> Phenyl Ester Epoxy Curative Hybrid	926305-16-0 (Y-LVE)	A phenyl ester epoxy curative hybrid.		<ul style="list-style-type: none"> <li>Hybrid cure</li> <li>Low viscosity</li> </ul>	Light Yellow Liquid	40	<ul style="list-style-type: none"> <li>UV Adhesives</li> <li>B-stageable adhesives</li> </ul>
R1170	<b>EC-298</b> Bisphenol F Acetate Propionate	1044794-71-7 (Y-LVE)	A difunctional phenyl ester epoxy curative.		<ul style="list-style-type: none"> <li>Stable</li> <li>Low viscosity</li> <li>Does not impede free radical cure</li> </ul>	Light Yellow Liquid	500	<ul style="list-style-type: none"> <li>Thermoset adhesives</li> <li>Curative for epoxy/(meth) acrylate hybrids</li> <li>Hybrid epoxy/free radical thermosets</li> </ul>
R1147	<b>EC-326</b> Bisphenol A Acetate Propionate	N/A (Y-LVE)	A bisphenol A based acetate/propionate epoxy curative.		<ul style="list-style-type: none"> <li>Hydrolytically resistant</li> <li>Low melting point</li> <li>Thermal stability</li> <li>Hydrophobic</li> <li>Toughener</li> <li>Does not impede free radical cure</li> </ul>	White/Yellow Solid	2,000***	<ul style="list-style-type: none"> <li>Film adhesives</li> <li>Pre-applied adhesives</li> </ul>
R1148	<b>EC-392</b> Phenyl Ester Epoxy Curative Hybrid of Bisphenol A	1071466-61-9 (Y)	A phenyl ester epoxy curative hybrid of bisphenol A.		<ul style="list-style-type: none"> <li>Dual cure mechanism</li> <li>High cross-link density</li> <li>Multifunctional</li> <li>Thermal stability</li> </ul>	Amber Liquid	2,500	<ul style="list-style-type: none"> <li>B-stageable adhesives</li> <li>Epoxy and BMI co-curative</li> </ul>
R1165	<b>EC-861</b> X-Acetate	1071523-12-0 (Y)	A phenyl acetate epoxy curative.		<ul style="list-style-type: none"> <li>Low modulus</li> <li>Toughener</li> <li>Hydrolytically resistant thermosets</li> <li>Hydrophobic</li> <li>Thermal stability</li> <li>Does not impede free radical cure</li> </ul>	Amber/Yellow Liquid	2,500	<ul style="list-style-type: none"> <li>Low stress epoxy thermosets</li> </ul>
R1149	<b>EC-1074</b> X-Tetra-phenol	926657-64-9 (Y)	A tetra-phenol epoxy curative derived from dimerdiol.		<ul style="list-style-type: none"> <li>Low modulus</li> <li>Toughener</li> <li>Hydrolytically resistant thermosets</li> <li>Hydrophobic</li> <li>Thermal stability</li> </ul>	Amber Glassy Solid	N/A	<ul style="list-style-type: none"> <li>Film adhesives</li> <li>Pre-applied adhesive compositions</li> </ul>

P/N	PRODUCT	CAS NO. TSCA Listed (Y/N)	DESCRIPTION	STRUCTURE**	FEATURES	APPEARANCE	VISCOSITY (25deg C)	SUGGESTED APPLICATIONS
<b>LATENT EPOXY CATALYSTS</b>							Room Temp	cP
R1198	<b>ECAT-243</b> Imidazole Epoxy Catalyst	1253404-90-8 (Y)	An imidazole epoxy catalyst that demonstrates good latency.	Unavailable	-Good solubility in most epoxy monomers. -Excellent latency characteristics	Yellow Crystalline Solid	N/A	-Electronic mold compounds -Underfills
<b>MONOFUNCTIONAL MONOMERS</b>							Room Temp	cP
R1173	<b>MM-204</b> Dicyclopentadiene Acrylate	33791-58-1 (Y)	A monofunctional acrylate monomer.		-Low viscosity -High glass transition temp. -Low cure shrinkage -Hydrolytically resistant -Diluent for thermoset resins -High Tg	Light Tan Liquid	50	-UV or peroxide cured resins, coatings, or adhesives
R1175	<b>MM-211</b> Maleimidocaproic Acid (MCA)	55750-53-3 (Y)	An intermediate chain length, maleimide terminated carboxylic acid.		-Flexible aliphatic backbone -Maleimide and carboxylic acid functional groups -Adhesion promoter	White/Light Yellow Powder	N/A	-Intermediate for ester and amide linked maleimide monomers
R1139	<b>MM-220</b> Tricyclodecane Acrylate	93962-84-6 (Y-LVE)	A low viscosity mono-acrylate monomer.		-Low weight loss on cure -Helps reduce cure shrinkage -Low viscosity	Light Yellow Liquid	< 100	-UV cure coatings
R1121	<b>MM-281</b> Maleimidoundecanoic Acid (MUDA)	57079-01-3 (Y-LVE)	A long chain maleimide terminated carboxylic acid.		-Flexible aliphatic backbone -Maleimide and carboxylic acid functional groups -Adhesion promoter	White to Off-White Powder	N/A	-Intermediate for ester and amide linked maleimide monomers

P/N	PRODUCT	CAS NO. TSCA Listed (Y/N)	DESCRIPTION	STRUCTURE**	FEATURES	APPEARANCE	VISCOSITY (25deg C)	SUGGESTED APPLICATIONS
R1134	<b>MM-290</b> Isobornyl Cyclohexyl Acrylate (IBCHA)	903876-45-9 (Y)	A liquid mono-functional acrylate monomer.		<ul style="list-style-type: none"> <li>-Lower weight loss on cure than Isobornyl Acrylate (IBOA)</li> <li>-Mild, pleasant odor,</li> <li>-Hydrolytic resistance</li> </ul>	Light Tan Liquid	250	-UV or peroxide cured resins, coatings, or adhesives
R1197	<b>MM-304</b> Isobornyl Cyclohexyl Methacrylate (IBCHMA)	N/A (N)	A liquid mono-functional methacrylate monomer.		<ul style="list-style-type: none"> <li>-Very low color</li> <li>-Lower weight loss on cure than Isobornyl Methacrylate (IBOMA)</li> <li>-Mild, pleasant odor,</li> <li>-Hydrolytic resistance</li> </ul>	Colorless Liquid	80	-Dental -Reactive diluent
<b>POLYESTER ACRYLATE METHACRYLATES</b>						<b>Room Temp</b>	<b>cP</b>	
R1096	<b>PEAM-645</b> Polyester Acrylate/Methacrylate	921213-39-0 (Y)	A polyester acrylate/methacrylate that exhibits low CTE, high Tg, and high modulus.	 where n = 1 - 5	<ul style="list-style-type: none"> <li>-High Tg</li> <li>-Low CTE</li> <li>-High adhesion*</li> <li>-Thermal stability</li> </ul>	Amber Liquid	6,500 (40deg C)	-Low CTE thermosets
R1111	<b>PEAM-1044</b> Polyester Acrylate/Methacrylate	921214-61-1 (Y)	A polyester acrylate/methacrylate that exhibits excellent adhesion, low warpage, and hydrophobicity.	 where n = 1 - 5	<ul style="list-style-type: none"> <li>-Low warpage</li> <li>-Hydrophobic</li> <li>-High adhesion*</li> <li>-Thermal stability</li> </ul>	Amber Liquid	4,500	-Low stress coatings
R1144	<b>PEAM-1769</b> Polyester Acrylate/Methacrylate	921214-61-1 (Y)	A polyester acrylate/methacrylate that exhibits excellent adhesion, ultra low warpage, and hydrophobicity.	 where n = 1 - 5	<ul style="list-style-type: none"> <li>-Ultra low modulus</li> <li>-Hydrophobic</li> <li>-High adhesion*</li> <li>-Thermal stability</li> <li>-Adhesion to metals</li> <li>-Flexibilizer</li> </ul>	Amber Liquid	20,000	-Low stress coatings

P/N	PRODUCT	CAS NO. TSCA Listed (Y/N)	DESCRIPTION	STRUCTURE**	FEATURES	APPEARANCE	VISCOSITY (25deg C)	SUGGESTED APPLICATIONS
<b>POLYESTER METHACRYLATES</b>						<b>Room Temp</b>	<b>cP</b>	
R1188	<b>PEM-665</b> Polyester Methacrylate	N/A (N)	A methacrylate terminated polyester oligomer that has low color and low cure shrinkage.		<ul style="list-style-type: none"> <li>-Low color</li> <li>-Low shrinkage</li> <li>-Thermal stability</li> <li>-Tough</li> </ul>	Light Yellow Tint Liquid	6,500 (50deg C)	-Dental
R1157	<b>PEM-1066</b> Polyester Methacrylate	951244-55-6 (Y-LVE)	A polyester methacrylate that exhibits excellent adhesion, ultra low warpage, and hydrophobicity.		<ul style="list-style-type: none"> <li>-Low modulus</li> <li>-Hydrophobic</li> <li>-Excellent hydrolytic resistance</li> <li>-High adhesion*</li> <li>-Adhesion to metals</li> <li>-Flexibilizer</li> </ul>	Light Yellow Liquid	20,000	-Dental -Moisture resistant coatings
<b>HIGH TEMPERATURE URETHANES</b>						<b>Room Temp</b>	<b>cP</b>	
R1095	<b>U-793</b> Urethane Epoxy Methacrylate Resin (MEU)	869488-57-3 920758-62-9 920742-80-9 (Y)	Urethane resin functionalized with a methacrylate and an epoxy.	Unavailable	<ul style="list-style-type: none"> <li>-Excellent toughener</li> <li>-Hydrophobic</li> <li>-Flexible</li> <li>-Adhesion promoter</li> <li>-Dual cure mechanism</li> <li>-Good thermal stability</li> </ul>	Viscous Brown Liquid	4,300	-Pre-applied adhesives -UV adhesives
R1102	<b>U-835</b> Urethane Acrylate Methacrylate Resin (AMU)	869488-57-3 1003557-45-6 1003612-76-7 (Y-LVE)	Urethane resin functionalized with an acrylate and a methacrylate.	Unavailable	<ul style="list-style-type: none"> <li>-Excellent toughener</li> <li>-Fast cure</li> <li>-Flexible</li> <li>-Hydrophobic</li> <li>-Good thermal stability</li> </ul>	Yellow Liquid	3,000	-Adhesives for metal -UV adhesives

**DATA IS FOR REFERENCE ONLY AND MAY VARY DEPENDING ON TESING METHOD USED.**

\* Various substrates.

\*\* Many of the structures are an idealized representation of a statistical distribution.

\*\*\* Supercooled.

\*\*\*\* Storage at < 25deg C will result in the precipitation of some solids. The fully liquid state can be regenerated by warming to 40deg C until all solids redissolve.

LVE = Material is manufactured under a Low Volume Exemption (LVE) in compliance with Section 5(h)(4) of the Toxic Substances Control Act (TSCA), 15 U.S.C.

**TO PLACE AN ORDER, REQUEST SAMPLES, OR TO SPEAK WITH US ABOUT DEVELOPING A PRODUCT FOR YOUR CHEMICAL NEEDS, CONTACT US AT 858-348-1122.**