



Sunigum™ & Chemigum™

Elastomeric Modifiers for Thermoplastics & Friction

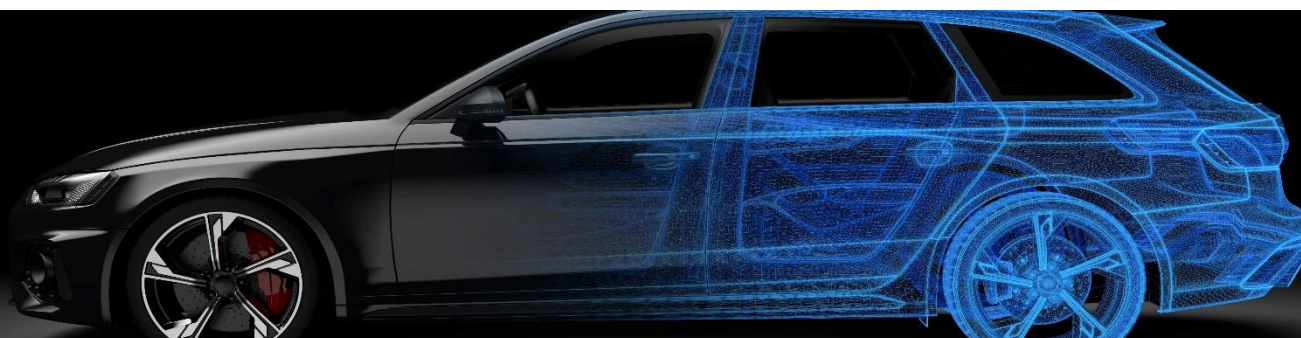
Chemigum™ and Sunigum™ are used in a wide range plastic and rubber components. Industries from automotive to wire and cable, construction, hose and tubing, footwear and numerous others rely on the outstanding performance that our modifiers impart.

Depending on the application, they deliver performance and processing attributes like flexibility, retention of plasticizer in PVC, soft touch and matte finish. Elastomeric modifiers also provide resistance to oil, chemicals, and extreme or fluctuating temperatures.



Better Plastics.
Better Planet.





A Growing Supplier of Speciality Polymers

Synthomer is one of the world's foremost suppliers of aqueous polymers and has leadership positions in many markets. Our polymers help customers create new products and enhance the performance of existing products in key industries. Synthomer has a strong track record of organic growth, as well as merges and acquisitions. As a result, we have grown our global manufacturing network, expanded our product portfolio and boosted our geographical presence, allowing it to better serve new and existing customers around the world.

We embed sustainability into every aspect of our business, to help us play a greater role in creating a fairer, more sustainable future and respond to the climate emergency.

Better Plastics. Better Planet.



Carbon footprint reduction



Recyclability



Waste reduction



Creating light weighting materials

Learn more about our [Elastomeric Modifiers](#) and how our solutions can support you to make better plastics for a better planet.

Sunigum™

Sunigum™ is a crosslinked acrylate terpolymer enabling superior performance in engineering thermoplastics and thermoplastic elastomers by advancing product properties, material efficiency and productivity.

Sunigum™ products impart soft-touch haptics (softness) and matte finishes, and improve resistance to weathering, heat, UV, chemicals, oils and fuels. They can be blended with TPOs through reactive compatibilization techniques enabled by carboxylic functional groups in the polymer structure.

Compatible with polar polymers like PVC, CPE, TPC, TPU, ASA/ABS/SAN as well as other polymers with some polarity including ethylene copolymers: EVA and EMA.



	Average Particle Size (mm)	ACN (%)	Specific Gravity	Polymer Structure	Acid Number (mg KOH/g)	Partitioning Agent	Properties
Sunigum P95	0.50	13	1.10	Pre-crosslinked	3.4	Calcium carbonate	UV, heat, chemicals, oil & fuel resistance. Offers a matte, leather-like finish. Softness. Excellent weatherability.
Sunigum P2100	0.50	13	1.10	Pre-crosslinked	3.4	Calcium carbonate	Low compression set in PVC, UV, heat, chemicals, oil & fuel resistance. Imparts low compression set in PVC as well as color retention and weatherability.

Chemigum™ Powder

Chemigum butadiene acrylonitrile copolymer powders are designed specifically for high performance flexible PVC.

Chemigum reduces plasticizer migration in PVC, improving aging properties in applications with exposure to heat, oils, fats and fuels. Because they are elastomeric, Chemigum powders also impart flexibility, elongation and rubbery feel properties.

Chemigum elastomers work effectively in molding, extrusion, calendaring and thermoforming processes.



	Average Particle Size (mm)	ACN (%)	Specific Gravity	Polymer Structure	Viscosity ML (1+4) @ 100°C	Partitioning Agent	Properties
Chemigum P35	0.30	35	1.05	Pre-crosslinked	50	Calcium carbonate	Low compression set, resistance to abrasion. Plasticizer retention.
Chemigum P615 DS	0.50	33	1.04	Linear	50	Calcium carbonate	Resistance to abrasion, oils, fuels, animal fat. Low viscosity. Reduces noise & vibrations.
Chemigum P83	0.40	33	1.00	Pre-crosslinked	57	PVC resin	Plasticizer retention. Chemical resistance.
Chemigum P86F	0.30	33	1.04	Pre-crosslinked	52	Calcium carbonate	Very fine particle size. Processing aid. Reduces noise & vibrations
Chemigum P8BA	0.40	33	1.00	Pre-crosslinked	87	PVC resin	Low fog. Oil and chemical resistance. Good melt strength, processing aid in calendaring process.
Chemigum P7D	0.50	33	1.04	Branched	95	Calcium carbonate	High gel strength. Processing aid.
Chemigum P8D	0.40	33	1.04	Pre-crosslinked	85	Calcium carbonate	Processing aid. Oil and grease resistance. High viscosity. Reduces noise & vibrations.





Chemigum™ Latex

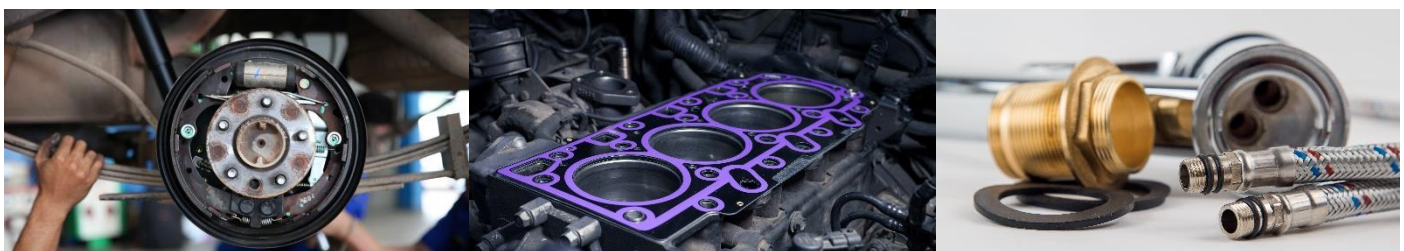
Chemigum latices are reactive (carboxylated) or non-reactive aqueous anionic dispersions of butadiene acrylonitrile copolymers (NBR) designed for gasket, friction and other applications.

Chemigum Latex grades provide good mechanical and oil resistance properties for many applications. Chemigum can be used in the modification of friction materials and is designed to be easily and evenly flocculated by salts in the beater addition process.

Chemigum elastomers work effectively in impregnation, coating, dipping, salt flocculation (beater addition), foaming and dry blending processes.



	Total Solids (%)	Mooney Viscosity ML (1+4), 100°C	ACN (%)	Polymer Structure	Surface Tension (mN/m)	Brookfield Viscosity (mPa-s)	Properties
Chemigum Latex 248	55	75	33	-	34	150	Excellent stability. High solids.
Chemigum Latex 6387	47	85	33	-	58	65	Good heat aging resistance.
Chemigum Latex 550	41	95	30	Carboxylated	40	25	Excellent oil resistance. Good mechanical properties. Good heat aging resistance.
Chemigum Latex 6271	46	50	35	Carboxylated	30	35	Excellent oil resistance. Good abrasion resistance. Heat Sensitization.
Chemigum Latex 450	45	55	31	Carboxylated	33	45	Excellent oil resistance. Good balance between abrasion and softness.



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<https://www.synthomer.com/emod/>





Product Selection and Application Guide – Powder

	Characteristics						Blends				Features
	Mooney Viscosity ML (1+4), 100°C	ACN (%)	Polymer Structure	Median Particle Size (mm)	Partitioning Agent	Specific Gravity	PVC	TPU	TPC	Others	
Nitrile Elastomers (NBR) in Powder Form											
Chemigum P83	57	33	Pre-crosslinked	0.40	PVC	1.00	●				● Best all-round modifier of plasticized PVC for improved properties and melt processing.
Chemigum P8BA	87	33	Pre-crosslinked	0.40	PVC	1.00	●				● High melt strength. Particularly recommended for extrusion and calendaring. Low fog.
Chemigum P35	50	35	Pre-crosslinked	0.30	CaCO ₃	1.05	●				● Low compression-set for dynamic applications.
Chemigum P86F	52	33	Pre-crosslinked	0.30	CaCO ₃	1.04	●	●		●	● Very fine particle size. General purpose grade for halogen-free blend.
Chemigum P8D	85	33	Pre-crosslinked	0.40	CaCO ₃	1.04					● High viscosity grade for friction materials in dry processes.
Chemigum P7D	95	33	Branched	0.50	CaCO ₃	1.04					● High viscosity grade for friction materials in dry & semi-wet processes.
Chemigum P615DS	50	33	Linear	0.50	CaCO ₃	1.04	●			●	● Low viscosity grade for friction materials in dry & semi-wet processes.
Acrylate Elastomers in Powder Form											
Sunigum P2100	30*	13	Pre-crosslinked	0.50	CaCO ₃	1.10	●			●	● Low compression-set for dynamic applications in PVC.
Sunigum P95	25*	13	Pre-crosslinked	0.50	CaCO ₃	1.10	●	●	●	●	● Outstanding heat & UV resistance. Wide range of compatibilities.

*measured at 150°C

Fast facts

- Long heritage and market-leading
- Broad product range
- Different polymer structures
- Global availability
- Strong partnerships with major distributors in each region
- ✓ Flexibility
- ✓ Soft touch haptics
- ✓ Matte effect
- ✓ UV stability
- ✓ Low modulus
- ✓ Chemical and oil resistance
- ✓ Customizable hardness range
- ✓ Reduced plasticizer migration
- ✓ Elastic recovery (compression set)
- ✓ Resistance to heat aging
- ✓ Efficient energy management as processing aid (sustainable production)



Product Selector



Application Guide – Powder

	Automotive					Construction					Other Applications			
	Interior Moldings (e.g. bellows, arm-rests), Overmoldings	Weatherstrips	Auto Interior Sins	Decorative Profiles Spoilers	Friction Parts (e.g. brake linings, clutch disks)	PVC Window Gaskets	Roofing Membranes	Waterstops	Flooring	Other (e.g. sealing, profiles)	Footwear	Wire and Cable	Hoses & Tubings	Consumer Goods
Nitrile Elastomers (NBR) in Powder Form														
Chemigum P83	•	•		•	•	•	•	•	•	•	•	•	•	•
Chemigum P8BA			•	•						•	•			
Chemigum P35		•		•	•	•				•	•	•	•	•
Chemigum P86F					•					•				
Chemigum P8D					•									•
Chemigum P7D					•							•		
Chemigum P615DS					•					•				
Acrylate Elastomers in Powder Form														
Sunigum P2100	•	•				•				•				
Sunigum P95	•		•	•			•			•	•	•	•	•

Application Guide - Latex

	Applications						
	Metallic Elastomer Gaskets	Friction Parts (e.g. brake linings, clutch disks)	Conveyor belts	Industrial Fiber Gaskets	Adhesives & Primers (e.g. masking tapes)	Non-Woven	Supported Gloves
NBR Latex							
Chemigum Latex 248		•		•	•		
Chemigum Latex 6387		•		•	•	•	
Chemigum Latex 550	•		•		•	•	•
Chemigum Latex 6271	•		•		•	•	
Chemigum Latex 450	•		•		•		•



Better Plastics. Better Planet.



Carbon footprint reduction



Recyclability



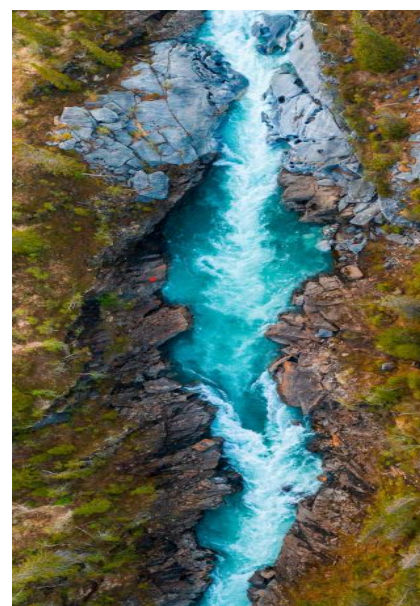
Waste reduction



Creating light weighting materials

Learn more about our Elastomeric Modifiers and how our solutions can support you to make better plastics for a better planet.

Simply talk to us! We look forward to creating and delivering a sustainable future together with you!



Synthomer's group-wide approach to sustainability

We want to embed sustainability into every aspect of our business, to help us play a greater role in creating a fairer, more sustainable future and respond to the climate emergency.

Our commitment to net zero

We made a public commitment in 2020 to reach net zero by 2050, in line with the Paris Agreement. To achieve this, we are:

- Using our innovation skills to develop new products made with lower-carbon raw materials and more efficient manufacturing processes
- Ending coal use at our operations
- Starting work to define new science-based targets
- Using new sustainability scorecards to assess our innovation programs and capital expenditure
- Establishing internal lifecycle assessments to assess the viability and resource needs of our products
- Establishing partnerships with suppliers to drive down emissions across our supply chain
- Addressing end-of-life product management across our markets
- Working to incorporate a carbon price into our capital planning.

Our targets are underpinned by a series of short-term objectives and are aligned with the UN's Sustainable Development Goals (SDGs) that are most material to our business.

The UN's SDGs most relevant to our Vision 2030 goals:



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