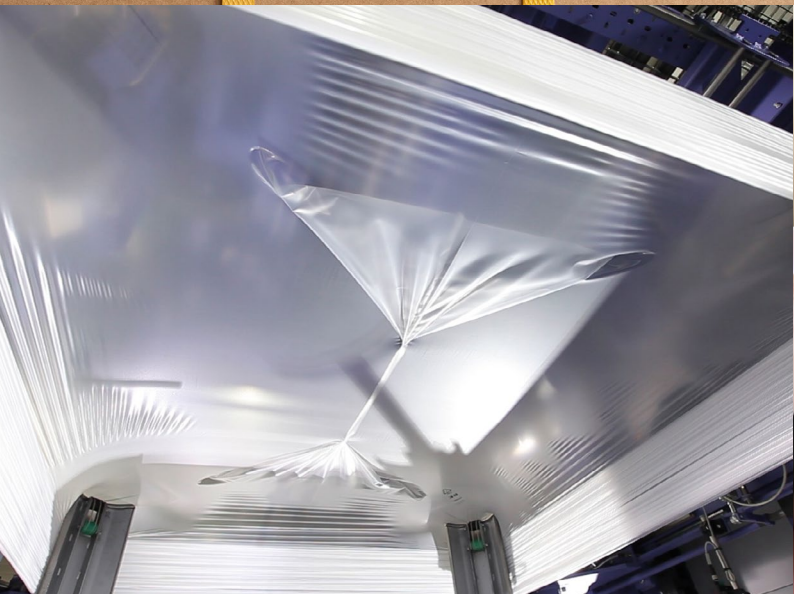


ELVALOY™ AC Acrylate Copolymers

Product brochure

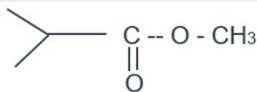
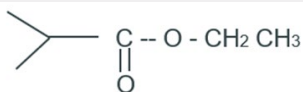
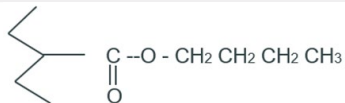
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ELVALOY™ AC represents a family of ethylene acrylate copolymers. Their composition and distinct production process results in a material with specific characteristics that set them apart from other copolymer resins. Key features include:

- high thermal stability during processing
- elasticity without plasticizers
- softness and flexibility without sticking (Shore A: <60 - 100)
- versatility in blends with both polar and non-polar substrates
- European food contact compliance for selected grades
- compatibility with PE recycling streams (i.e. Recyclass - recyclass.eu/guidelines/natural-pe-flexible-films/)

The product portfolio includes materials with different acrylate comonomers that provide individual features:

EMA (ethylene-methyl acrylate)	EEA (ethylene-ethyl acrylate)	EBA (ethylene-butyl acrylate)
<ul style="list-style-type: none"> • higher polarity at the same weight loading • higher thermal stability 	<ul style="list-style-type: none"> • less sticking to metal surfaces 	<ul style="list-style-type: none"> • “softer” feel • low temperature flexibility (Tg = -35°C)
		

The combination of performance parameters and their versatility makes ELVALOY™ AC copolymers the best choice in a large variety of applications:

Wide application breadth		
Application field	Value in-use	Application example
Masterbatch	broad compatibility, superior thermal resistance, filler acceptance and dispersion, high melt strength, toughness	TiO ₂ , pigments, flame retardants, slip agents, UV stabilizers, antifog, etc.
Polymer modification	toughening, compatibilization, processability enhancer	PET, ABS/PC, ABS, PA, PP, enabling recycling of PET/PE, ABS/PC, PBT/PC
Trays	toughening (low temperature), compatibilization, processability enhancer	CPET, APET
Elastic films	elasticity without stickiness and breathability	stretch hood, hygiene film, medical gowns, roofing membranes
Soft touch and flexibility	soft feeling and low modulus	ostomy bags, medical gloves, extrusion blow molded (EBM) parts, tubes, inflatables
Foams	stiffness, high thermal-mechanical resistance	enhances PE foamability and toughness

Ethylene acrylate copolymers are interesting alternative options to other resins, providing benefits in multiple applications.

Advantages of ELVALOY™ AC Acrylate Copolymers	
Compared to	Advantage
EVA	<ul style="list-style-type: none"> • Higher thermal stability • No corrosive by-products (EVA can degrade to give corrosive acetic acid) • Higher end-use temperature (higher melting temperature) • Low temperature flexibility (EBA is best) • Non-sticky pellets, less tacky
PVC	<ul style="list-style-type: none"> • Flexibility without plasticizers • Halogen free • Less smoke emission during fire • Thermal stability • Lower density (0.94 vs. 1.3)
mPE	<ul style="list-style-type: none"> • Easy processing • Better adhesion due to polarity • High melt strength

Product portfolio

Product	MI dg/min	Density g/cm³	Comonomer	Acrylate (wt%)	Melting point (°C)	Vicat softening point (°C)	Additives	Most typical applications
ELVALOY™ AC 1125 Acrylate Copolymer	0.5	0.944	MA	25	90	48		Polyester modifier, wire and cable, footwear
ELVALOY™ AC 12024S Acrylate Copolymer	20	0.944	MA	24	88	-	AO	Polymer modifier, adhesives
ELVALOY™ AC 1209 Acrylate Copolymer	2	0.927	MA	9	101	70		Flexible packaging
ELVALOY™ AC 1218 Acrylate Copolymer	2	0.940	MA	18	94	60		Flexible packaging, polymer modifier
ELVALOY™ AC 1224 Acrylate Copolymer	2	0.944	MA	24	91	48		Flexible packaging, trays, polymer modifier, masterbatch, soft touch
ELVALOY™ AC 1330 Acrylate Copolymer	3	0.950	MA	30	85	-	AO, Slip	Polymer modifier, soft touch
ELVALOY™ AC 1609 Acrylate Copolymer	6	0.930	MA	9	101	70		Polymer modifier
ELVALOY™ AC 1820 Acrylate Copolymer	8	0.942	MA	20	92	54		Masterbatch, polymer modifier, industrial film, foams
ELVALOY™ AC 1913 Acrylate Copolymer	9	0.935	MA	13	86	62		Flexible packaging
ELVALOY™ AC 2116 Acrylate Copolymer	1	0.930	EA	16	96	60		Waterproofing membranes, compounding, masterbatch
ELVALOY™ AC 2615 Acrylate Copolymer	6	0.930	EA	15	97	58		Footwear, compounding, polymer modifier
ELVALOY™ AC 2618 Acrylate Copolymer	6	0.930	EA	18	95	56		Flexible packaging, polymer modifier
ELVALOY™ AC 3117 Acrylate Copolymer	1.5	0.924	BA	17	99	60		Compounding, flexible packaging
ELVALOY™ AC 3117LG Acrylate Copolymer	1.5	0.924	BA	17	99	60		Medical packaging
ELVALOY™ AC 3217 Acrylate Copolymer	1.8	0.926	BA	17	92	70	AO, Slip, AB	Medical packaging
ELVALOY™ AC 34035 Acrylate Copolymer	40	0.930	BA	35	90	-	AO, AB	Compounding
ELVALOY™ AC 3427 Acrylate Copolymer	4	0.926	BA	27	94	45		Hotmelt adhesives, paving, polymer modifier, soft touch
ELVALOY™ AC 3717 Acrylate Copolymer	7	0.924	BA	17	96	55		Medical packaging, compounding

Images: dow_75752243814, dow_42006397932, dow_68152147551, dow_64933201983

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