



TPE 2K
Overmolding Series

ENFLEX[®]
& EZPRENE[®]
TPV

ENSOFT[®]
TPE-S





ENFLEX® & EZPRENE® TPV / ENSOFT® TPE-S

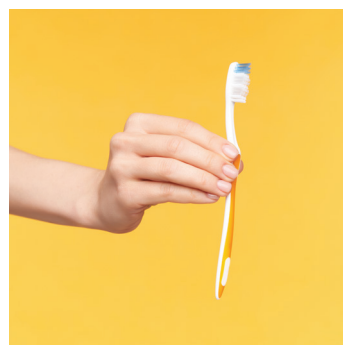
Consumer goods
Two component grips & handles
Power-tools grips
Automotive components
(e.g. Duct seal, sealing, gaskets, cupholder)

Ravago TPE in Overmolding Industry

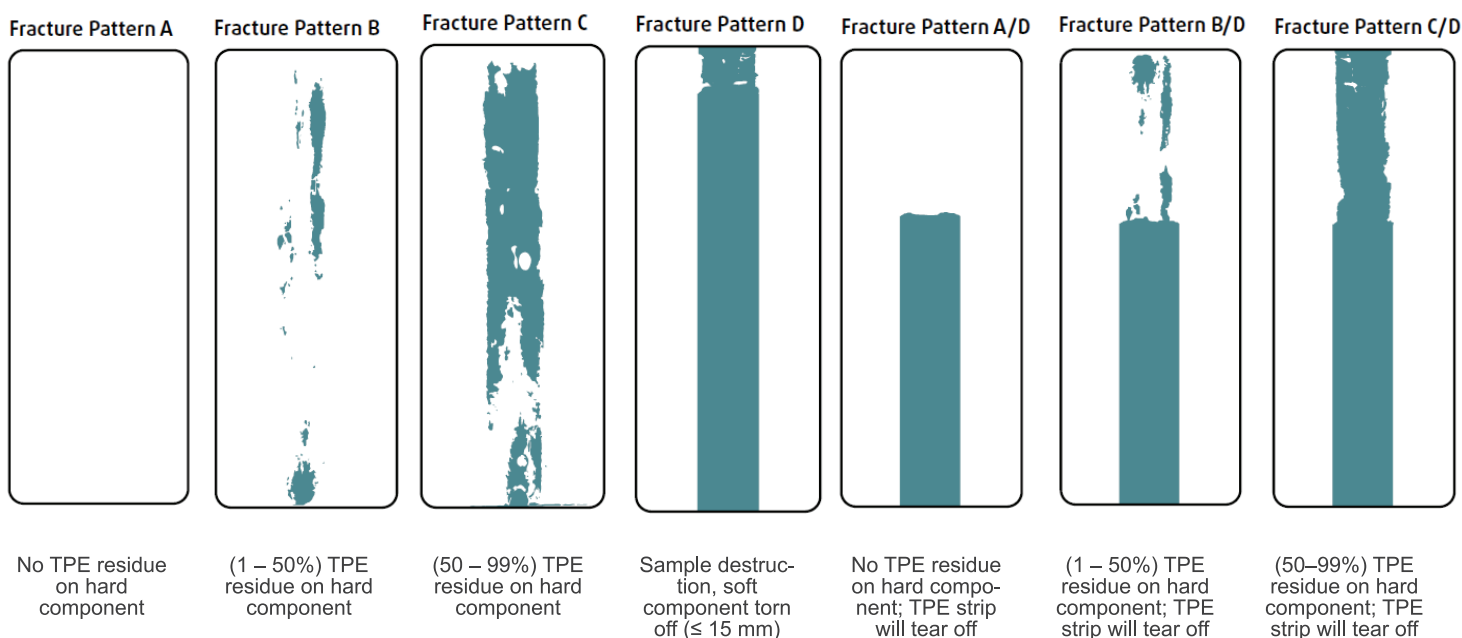
2K or overmolding processes, where durability and functionality come together, have an important place in the plastic industry.

Our Styrenic (SEBS) based Ravatech & Ensoft & TPV (EPDM-PP) based Ezprene TPEs and rigid plastic injection moldings are bonded to each other very well, there is no need for a separate primer or adhesive. This makes the process faster and more cost-effective.

Our TPE 2K grades form excellent bonds on PP, PE, PA6, ABS, PC, PC-ABS, PS, ASA, SAN and their blends.



Evaluation of Peel Strength



A No TPE residue on hard component

B (1 – 50%) TPE residue on hard component

C (50 – 99%) TPE residue on hard component

D Sample destruction, soft component torn off (≤ 15 mm)

A/D No TPE residue on hard component; TPE strip will tear off

B/D (1 – 50%) TPE residue on hard component; TPE strip will tear off

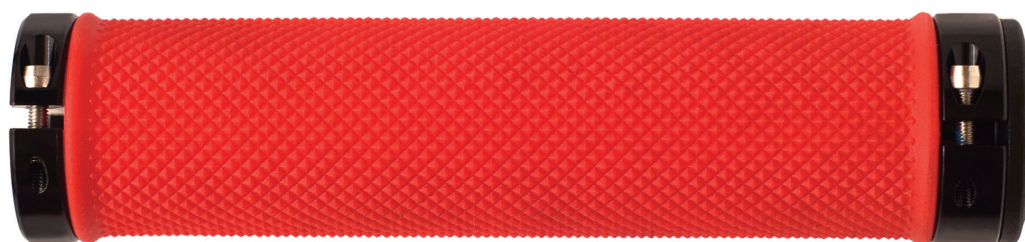
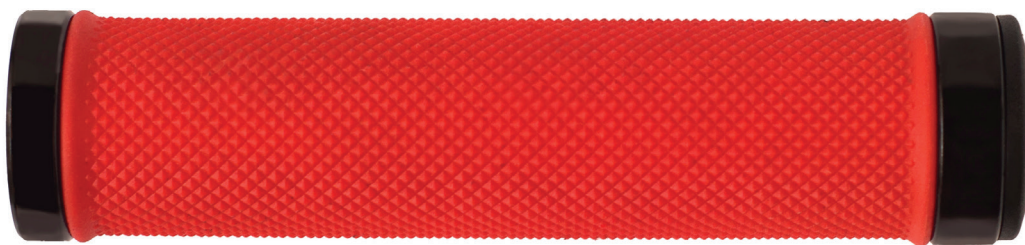
C/D (50–99%) TPE residue on hard component; TPE strip will tear off



ENFLEX® & EZPRENE® TPV / ENSOFT® TPE-S

PC, ABS, PC/ABS Overmolding

- Generated enhanced bonding performance and enhanced mechanical properties
- Suitable to use interior and under the hood automotive applications
- UV, ozone and weather resistant
- Suitable for hand tools where look for chemical resistance
- Service temperature -40°C to +125°C
- Recyclable and easy colorable
- REACH and RoHS conformity
- Soft touch and easy processing
- Availability from 30A to 80A shore hardness for TPE series





ENFLEX® & EZPRENE® TPV / ENSOFT® TPE-S

RAVATECH PC- ABS- PC/ABS Overmolding

Excellent Adhesion Performance Skin Contact Compliance

	RO24930AT2	RO24940AT2	RO24950AT2	RO24960AT2	RO24970AT2	RO24980AT2
Hardness (ShA)	30	40	50	60	70	80
Density (g/cm3)	1,1	1,1	1,1	1,1	1,1	1,1
100% Modulus (MPa)	0,8	1	1,3	1,7	2,4	3,2
300% Modulus (MPa)	1,7	2	2,5	3	3,9	5
Tensile Strength (MPa)	2	2,5	4,5	6,5	10	15
Elongation at Break (%)	420	450	530	660	720	740
Tear Strength (Perpendicular to flow) (N/mm)	10	13	20	27	40	54
Peel Strength from ABS Surface	2 (B/D)	3 (B/D)	4 (B/D)	5 (B)	4 (B)	4 (B)
Peel Strength from PC Surface	2 (C)	3 (B/D)	4,5 (B/D)	5 (B/D)	5,5 (B)	6,8 (B)

Intermediate hardness levels are available

ENSOFT PC- ABS- PC/ABS Overmolding

Good Adhesion Performance FCA Compliance

	SO21930AT2	SO21940AT2	SO21950AT2	SO21960AT2	SO21970AT2	SO21980AT2
Hardness (ShA)	30	40	50	60	70	80
Density (g/cm3)	0,94	0,94	0,94	0,94	0,94	0,94
100% Modulus (MPa)	0,4	0,7	0,9	1,3	1,8	2,3
300% Modulus (MPa)	1,1	1,6	1,9	2,5	3,1	3,9
Tensile Strength (MPa)	6	8	11	14	16	20
Elongation at Break (%)	800	700	800	850	830	770
Tear Strength (Perpendicular to flow) (N/mm)	20	25	30	38	43	48
Peel Strength from ABS Surface	1,8(A)	2,1 (A)	2,5 (A)	2,5 (A)	2,9 (A)	2,6 (A)
Peel Strength from PC Surface	2 (A)	2,4 (A)	2,5 (A)	3 (A)	3,8 (A)	4 (A)

Intermediate hardness levels are available



ENFLEX® & EZPRENE® TPV / ENSOFT® TPE-S

ENSOFT PA6 & 6.6 & GFPA6 & GFPA6.6 Overmolding Series

- Generated enhanced bonding performance and enhanced mechanical properties
- Suitable to use interior and under the hood automotive applications
- UV, ozone and weather resistant
- Suitable for hand tools where look for chemical resistance
- Service temperature -40°C to +125°C
- Recyclable and easy colorable
- REACH and RoHS conformity
- Soft touch and easy processing
- Availability from 25A to 80A shore hardness for TPE series
- Availability from 50A to 75A shore hardness for TPV series
- Suitable for thin wall parts even with low shore hardness



ENFLEX® & EZPRENE® TPV / ENSOFT® TPE-S

ENSOFT PA6 & 6.6 & GFPA6 & GFPA6.6 Overmolding Series

	SX20130AT2	SX20140AT2	SX20150AT2	SX20160AT2	SX20170AT2	SX20180AT2
Hardness (ShA)	30	40	50	60	70	80
Density (g/cm3)	0,9	0,9	0,9	0,9	0,9	0,9
100% Modulus (MPa)	0,6	0,7	0,9	1,3	2	2,7
300% Modulus (MPa)	1,1	1,3	1,8	2,2	3	4
Tensile Strength (MPa)	4,8	5,5	8	9	10	11
Elongation at Break (%)	870	800	850	750	750	700
Tear Strength (Perpendicular to flow) (N/mm)	15	18	20	25	30	35
Peel Strength from PA6 Surface	2 (D)	2,4 (D)	2,5 (D)	3,3 (B/D)	4 (B/D)	4,8 (B/D)
Peel Strength from PA6.6 Surface	2 (A)	2,1 (B)	2,8 (B/D)	3,5 (D)	4,5 (D)	5,3 (D)
Peel Strength from PA6 30GF Surface	2 (B/D)	2,3 (B/D)	2,7 (B/D)	3,6 (B/D)	4,4 (B/D)	4,7 (B/D)

EZPRENE PA6 & 6.6 & GFPA6 & GFPA6.6 Overmolding Series

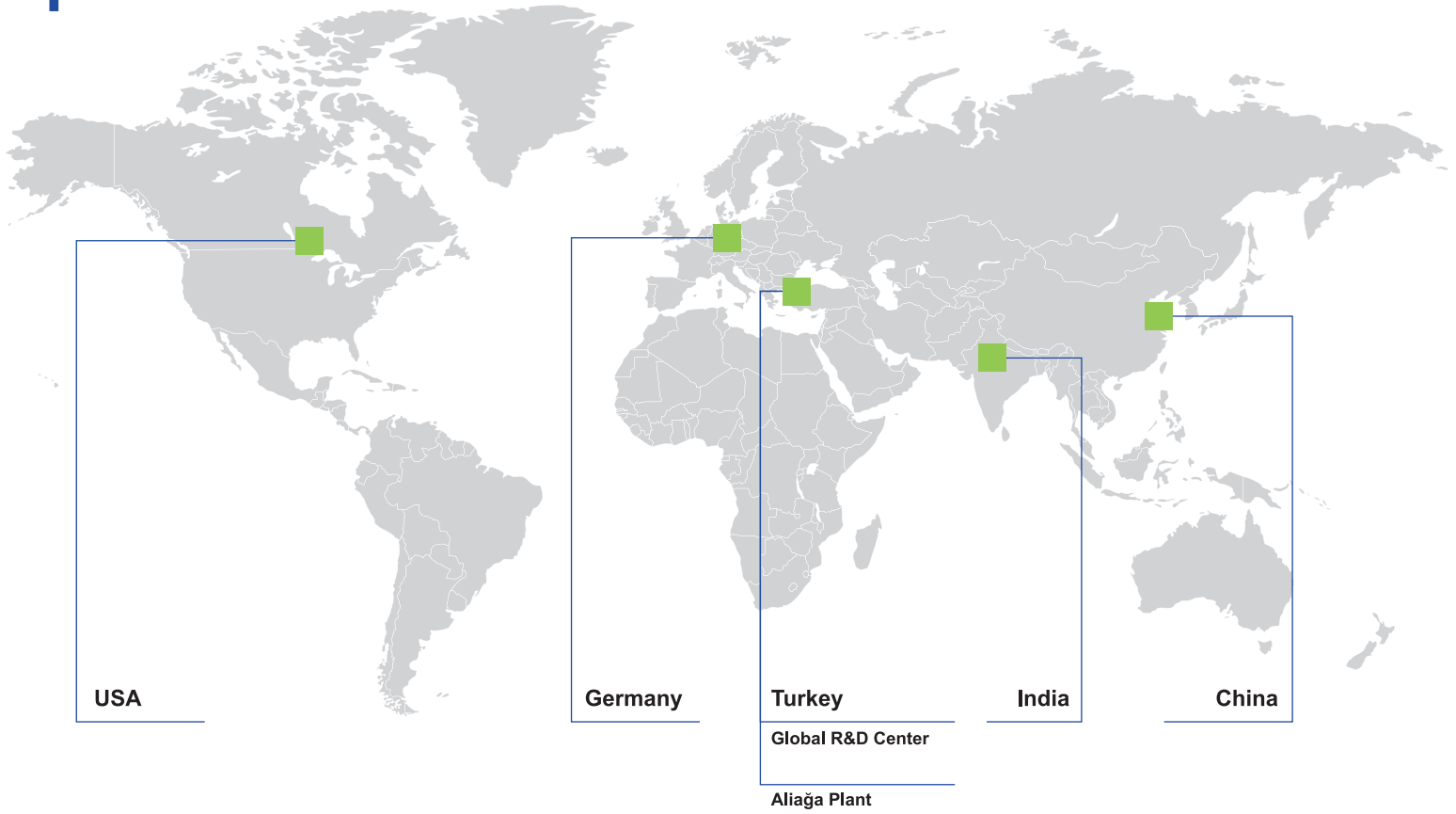
	VX20155AT2	VX20160AT2	VX20165AT2	VX20170AT2	VX20175AT2
Hardness (ShA)	55	60	65	70	75
Density (g/cm3)	0,9	0,9	0,9	0,9	0,9
100% Modulus (MPa)	1,4	1,6	1,8	2	2,5
300% Modulus (MPa)	2,2	2,4	2,6	3	4
Tensile Strength (MPa)	3,4	4,5	5	5,5	6
Elongation at Break (%)	470	570	600	640	500
Tear Strength (Perpendicular to flow) (N/mm)	18	24	27	32	35
Peel Strength from PA6 Surface	3 (D)	3,7 (D)	3,8 (D)	4 (B)	4,1 (B)

“Don't try to be
the best, try to
work with the
best”

Raf Van Gorp
Founder



Manufacturing plants



📍 Ravago Petrokimya Üretim A.Ş.
Çoraklar Mh. 5000 Sk. No:7-17 AOSB Aliağa/ İzmir / Türkiye

☎ +90 850 314 70 99

🌐 www.ravagopetrokimya.com ✉ tpe.sales.tr@ravago.com

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