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NEERING  
LIFE

**TPE SOLUTIONS FOR  
CONSTRUCTION  
APPLICATIONS**





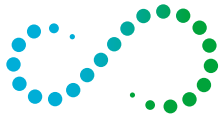
# **Everyday Life Engineering Partner of Global TPE Users**

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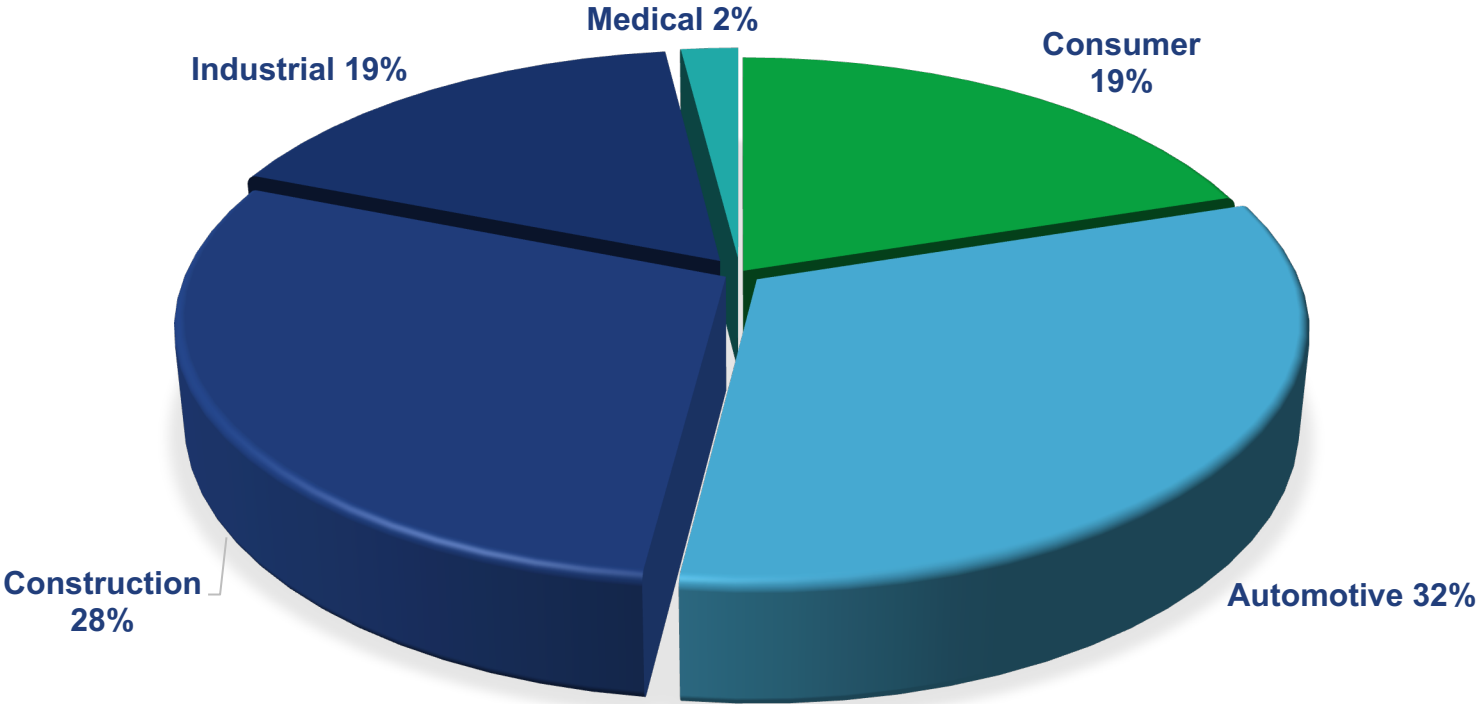


MARKETS

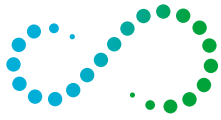


## Market Sales Distribution

Markets	Percentage Distribution
Automotive	32%
Construction	28%
Consumer Goods	19%
Industrial	19%
Medical	2%

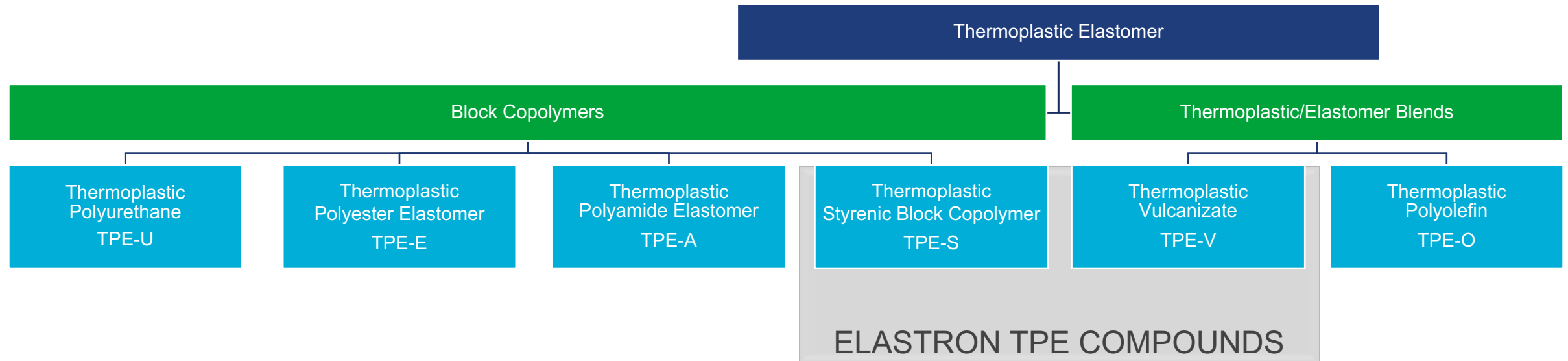


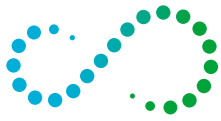




## Thermoplastic Elastomers

Thermoplastic elastomers are a group of rubber-like materials that, unlike vulcanized conventional rubber materials, can be processed and recycled like thermoplastic materials. Thermoplastic Elastomers do not require curing or vulcanization during processing and can be processed by traditional thermoplastic processing equipment.





Easy Coloring



Recyclability



Temperature  
Resistance



Weathering  
Resistance



Wide Hardness  
Range



Flexibility



Elasticity



Recovery

	Elastron G	Elastron V	Elastron D
Structure	SEBS/PP based TPE compounds	Crosslinked TPE compounds	SBS/PP based TPE compounds
Hardness (Shore A/D)	12 A - 65 D	30 A - 65 D	20 A - 65 D
Density (g/cm <sup>3</sup> )	Min. 0.88	Min. 0.90	Min. 0.89
Compression Set	Good	Very Good	Medium
Elasticity	High	Very High	Medium
Service Temperature (°C)	-50°C to 120°C	-50°C to 135°C	-50°C to 70°C
UV Resistance	Good	Good	Poor
Organic Solvent Resistance	Variable	Variable	Poor
Acid-Base Resistance	Good	Good	Good
Adhesion (Standard grades)	PP, PE, EVA	PP, PE, EVA	PP, PE, EVA
Adhesion (Bondable grades)	ABS, PC, PC/ABS, PBT, PETG, ASA, SAN, PMMA, PET, PA6/6.6, PS, HIPS, EPDM	EPDM	PS





## Product Line

### General Purpose Grades

- Multi-purpose TPE-S and TPV compounds
- Various series lightweight to high density
- Extrusion grades to high flow grades
- **G101 – V101 Series**
- **G100 – V100 Series**

### High Temperature Resistant Grades

- Excellent long-term performance at high temperatures for sealing applications
- **G201 – V201 Series**

### Weatherseal Grades

- Excellent long-term performance for outdoor applications
- **G250 – G260 – V250 Series**
- **V251 – G261 Series**

### High Flow Grades

- Low viscosity
- Easy filling of complex molds
- Long-term performance for outdoor applications
- **G150 – G104 Series**

### Impact Modifiers for

- PP
- PE
- ABS
- PC
- PS
- PA
- **D100 – D400 Series**
- **G500 Series**

### Bondable Grades

- PA, ABS, PC, PS and ABS/PC bondable grades for polar plastics to obtain soft touch property
- **G500 – PA/ABS/PS Series**
- **V510 – G510 – EM Series**

### Special Grades Conforming Various Regulations

- NSF/ANSI 61
- EU 10/2011
- FDA 21 CFR
- USP CLASS VI – ISO 10993
- **F.G & F.V series**
- **P.G & P.V series**
- **V281 Series**

### Flame Retardant Grades

- UL 94 V0 listed grades
- Low smoke density
- V1 – V2 grades
- HFFR – FR grades
- **G601 – V601 HFFR Series**

### Low Coefficient of Friction Grades

- Low friction for semi-dynamic applications
- **V216 – V206 Series**

### Non-hygroscopic TPVs

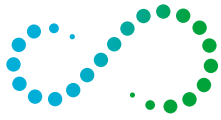
- Non-hygroscopic TPVs where good sealing properties and surface appearance are important
- **V860 – V861 Series**

Elastron TPE grades designed for construction industry are based on TPV and TPE-S compounds

CONSTRUCTION







## Elastron TPE Grades for Construction Applications

Elastron TPE grades are recyclable, easily colored with masterbatches and offer excellent surface appearance.

Elastron adds value to construction application designers and manufacturers by providing high-quality TPE compounds that offer design flexibility, easy processing and faster production.

Elastron's TPE grades, tailored specifically for the construction industry, are formulated using advanced TPV and SEBS compounds. These materials provide excellent elastic recovery, superior UV and weather resistance, and can perform across a wide range of service temperatures.



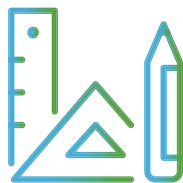


## Key Features of Elastron TPE Grades for Construction Applications



### Material Properties

- Rigid, soft and ultra-soft components for dual and tri-durometer extrusions
- Good elastic recovery
- Durability
- Weathering resistance
- Lower surface friction
- Foamable
- Wide service temperature
- Weight reduction
- Excellent sealing performance



### Design

- Co-extrusion and over molding onto polyolefins
- Natural, black, pre-colored
- Colorable with masterbatch
- Design flexibility
- Easy to install
- Dimensional stability
- Hot plate welding



### Processing

- Suitable for co-extrusion
- Suitable for co-injection
- Lower energy consumption
- Recyclability
- Short processing cycle time
- No curing required
- No scrap



### Safety & Regulation

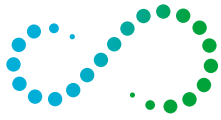
- RoHS conformity
- CSTB QB36
- SKZ RAL GZ 716/1
- UL Listed
- EN 681/2
- NSF/ANSI 61
- NSF/ANSI 14
- Low VOC emission



### Sustainability

- Recyclability
- PIR/PCR grades
- LCA data
- Higher recycle content
- In process recyclability
- Reducing of CO<sub>2</sub> emission





## Segments & Highlighted Applications

### Window Profile & Door Seals

- Window Profile Seals
- Door Seals

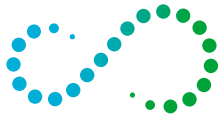
### Gasket & Seal Applications

- **Indoor**
  - Bathtub Seal
  - Shower Drain Joint Seal
- **Outdoor**
  - Spacer Tape for Facade

### Water Installations & Plumbing Applications

- Pipe & Hose
- Wastewater Pipe Seal
- Seals & Gaskets





## Approvals

### RAL GZ 716 - 1

- Windows Profile Seal
- Plastic Window Profile Systems

### CSTB QB36 Grade 5

- Windows Profile Seal
- Flexible Materials

### EN 681 – 2 Type: WT Hardness Class 60

- Elastomeric Seals
- Materials Requirements for Pipe Joint Seals Used in Water and Drainage Applications

### UL 94 V0 1,5mm & 3mm Thickness

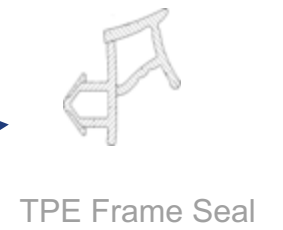
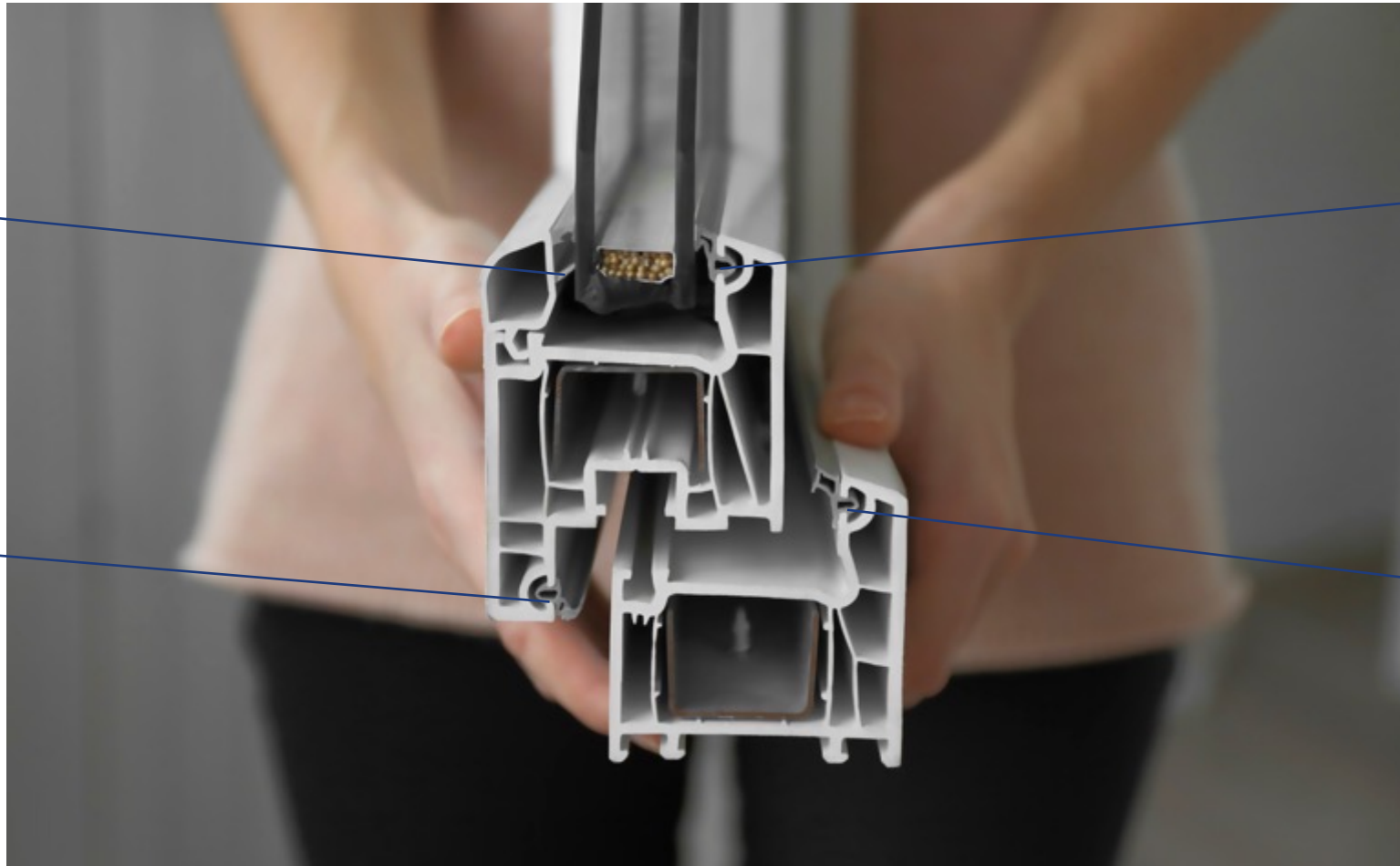
- HFFR Grades
- Test for Flammability of Plastic Materials for Parts in Devices and Appliances







## Window Profile Seals





### Window Profile Seals

#### Window Profile Seal

- G101 Series
- G201 Series
- G901 Series
- V901 Series
- V101 Series
- V201 Series
- V251.A65.B

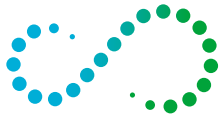
#### Glazing Rebate Profile

- V101.D51.N
- V101.A90.B

### Key Features

- ✓ Versatile Product Groups for PVC, Aluminium and Wood Profiles
- ✓ Extrusion / Co-Extrusion / Multi-Extrusion
- ✓ Hot Plate Welding
- ✓ Easy to Install
- ✓ Weathering Resistance
- ✓ Natural, Black, Pre-colored
- ✓ No Staining on The Profile
- ✓ Resistance to Gas Fade Discoloration
- ✓ Thermal Insulation





### Window Profile Seals – Certified Grades

Grades	Type	Color	Approval
V101.A65.703	TPV (EPDM/PP)	Grey	RAL-GZ716/1
V901.A60.701	TPV (EPDM/PP)	Grey	CSTB QB36
V101.A70.701	TPV (EPDM/PP)	Grey	RAL-GZ716/1
G201.A67.001	SEBS	White	CSTB QB36
G201.A67.009	SEBS	Grey	CSTB QB36
G201.A67.701	SEBS	Grey	CSTB and RAL-GZ716/1
G201.A67.702	SEBS	Grey	CSTB QB36
G201.A67.703	SEBS	Grey	CSTB QB36
G201.A67.801	SEBS	Caramel	CSTB QB36
G201.A67.802	SEBS	Dark Brown	CSTB QB36
G201.A67.803	SEBS	Brown	CSTB QB36
G201.A67.B	SEBS	Black	CSTB QB36





### Door Profile Seals

#### Door Seal

- G101.D46.B
- G301.A40.B
- G401.A75.N.S
- G901.A67.001
- V101.A47.B

#### Garage Door Seal

- G101.D46.B
- V101.A60.N
- V201.A65.N

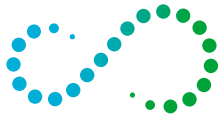
#### Sliding Door Stopper

- G101.D46.B
- V101 Series

### Key Features

- ✓ Excellent Sealing Property
- ✓ Good UV Resistance
- ✓ Resistant to Low and Elevated Temperatures
- ✓ Smooth Surface





### Indoor

#### Shower Cabinet Seal & Drain Joint Gasket

- V101.A47.B
- V101.A47.N
- V101.A50.B

#### Key Features

- ✓ Chemical Resistant to Aqueous Solutions
- ✓ Excellent Sealing Properties





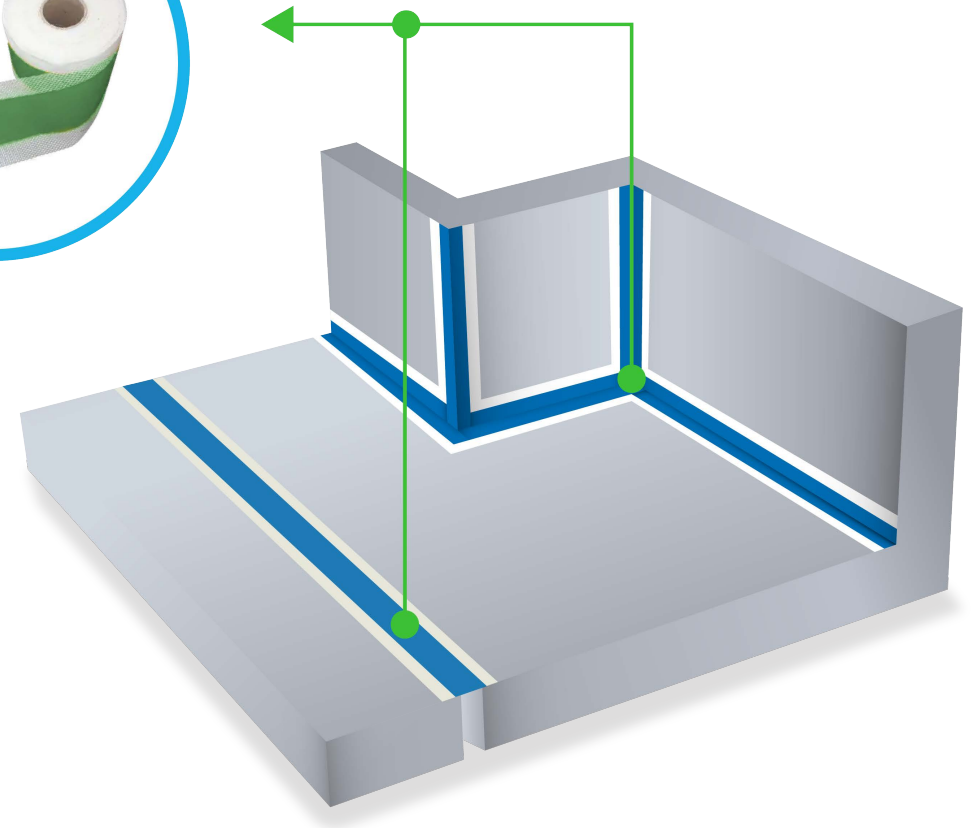
### Indoor

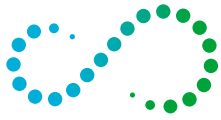
#### Waterproofing Tape

- G101.A90.B
- G400.D40.N
- G100.A70.701

#### Key Features

- ✓ Chemical Resistant to Aqueous Solutions
- ✓ Excellent Sealing Properties
- ✓ UV Resistant
- ✓ Elastic Recovery





### Outdoor

#### Roof Pass-Through Seal

- G100.A40.N
- G100.A40.B
- G300.A50.N
- G300.A50.B

#### Spacer Tape For Façade

- G301.D60.N

#### Key Features

- ✓ Good UV Resistance
- ✓ Aesthetic finish
- ✓ Easy Processing







### Pipe & Hose

#### Pipe Joint Gasket

- G100 & G101 Series
- G104.A60.B
- G401.A55.N
- V101.A72.B

#### Key Features

- ✓ Excellent Sealing Properties
- ✓ Low Compression Set
- ✓ Suitable for Co-Injection with Polyolefins
- ✓ Chemical Resistant to Aqueous Solutions





### Wastewater Pipe Seal

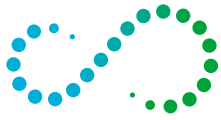
#### Wastewater Pipe Seal

- V100.A80.B
- V101.A50.B.S.1
- V201.A65.N

#### Key Features

- ✓ Resistant to Low and Elevated Temperature
- ✓ Co-Injection with Polyolefins
- ✓ Excellent Sealing Properties
- ✓ Chemical Resistant to Aqueous Solutions
- ✓ EN 681/2 Conformity





### Seals & Gaskets

#### Ball Valve Seal

- V101.A90.N
- V201.A70.B

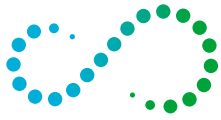
#### Sink Drain Seal

- G100.A50.B
- G100.A65.N
- V101.A60.N
- G101.A30.N

#### Key Features

- ✓ High Flow Grades
- ✓ Smooth Surface
- ✓ Chemical Resistant to Aqueous Solutions
- ✓ High Temperature Resistance





### Seals & Gaskets

#### Flush Seal

- V100.D40.B
- D100.A30.B
- D100.A30.N

#### Flush Tank Gasket

- G100.A20.B
- G104.A60.N
- D100.A40.N
- D300.A55.N

#### Toilet Seat Gasket

- D100.A58.B
- D100.A75.B
- G100 Series
- G100.A90.N

#### Gasket For Toilet

- D300.A55.N
- G100.A90.N

### Key Features

- ✓ Resistant to Low and Elevated Temperature
- ✓ Co-Injection with Polyolefins
- ✓ Co-Injection with Engineering Plastics
- ✓ Excellent Sealing Properties
- ✓ Chemical Resistant to Aqueous Solutions







Find out more about your  
TPE solutions partner now.

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