



Covestro
Deutschland AG
Thermoplastic
Polyurethanes
(TPU)

www.tpu.covestro.com
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Desmopan® Utechllan®

Thermoplastic Polyurethane (TPU) for Footwear

More possibilities for design, performance and sustainability





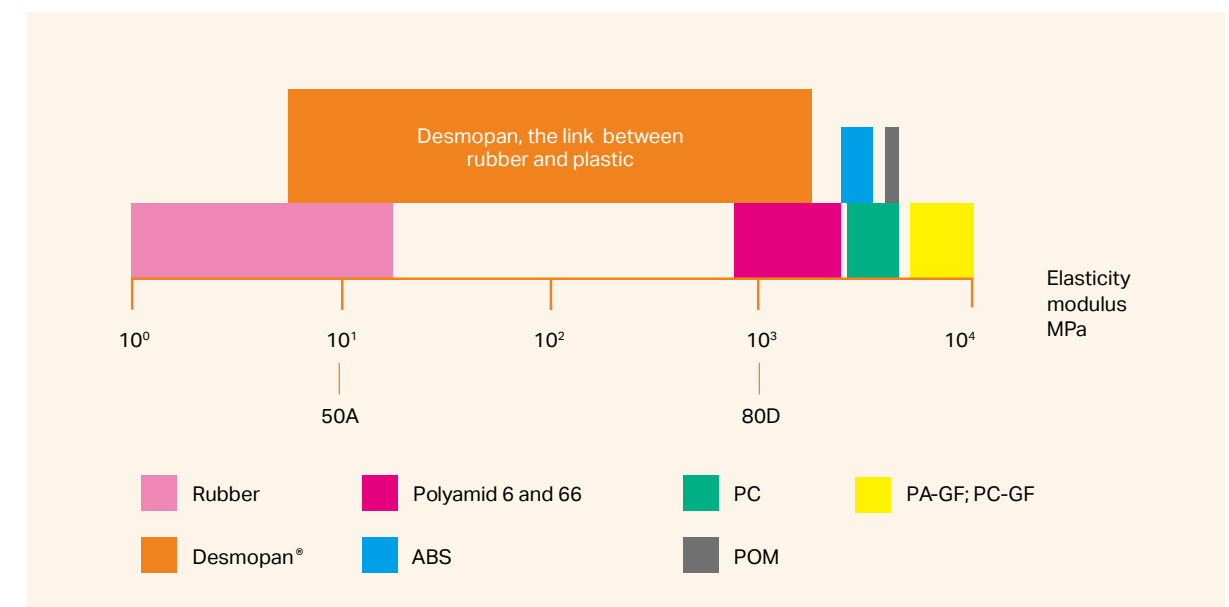
Covestro offers wide range of high-performance material to support shoe design on functionality, visual appearance and haptic.

Desmopan® and **Utechllan®** TPU are famous of outstanding tensile properties, low abrasion loss and low temperature flexibility. It could be converted to various functional and decorative shoes components, for example, torsion bar, soccer plate and cleats, toe cap, heel counter, air cushions, films, hot melts film, etc. Various foams out of Desmopan® are the latest innovation to support the lightweight trend while enhancing shoes long-term durability. Desmopan® TPU based fiber is another new development to bring the creativity to shoe upper design.



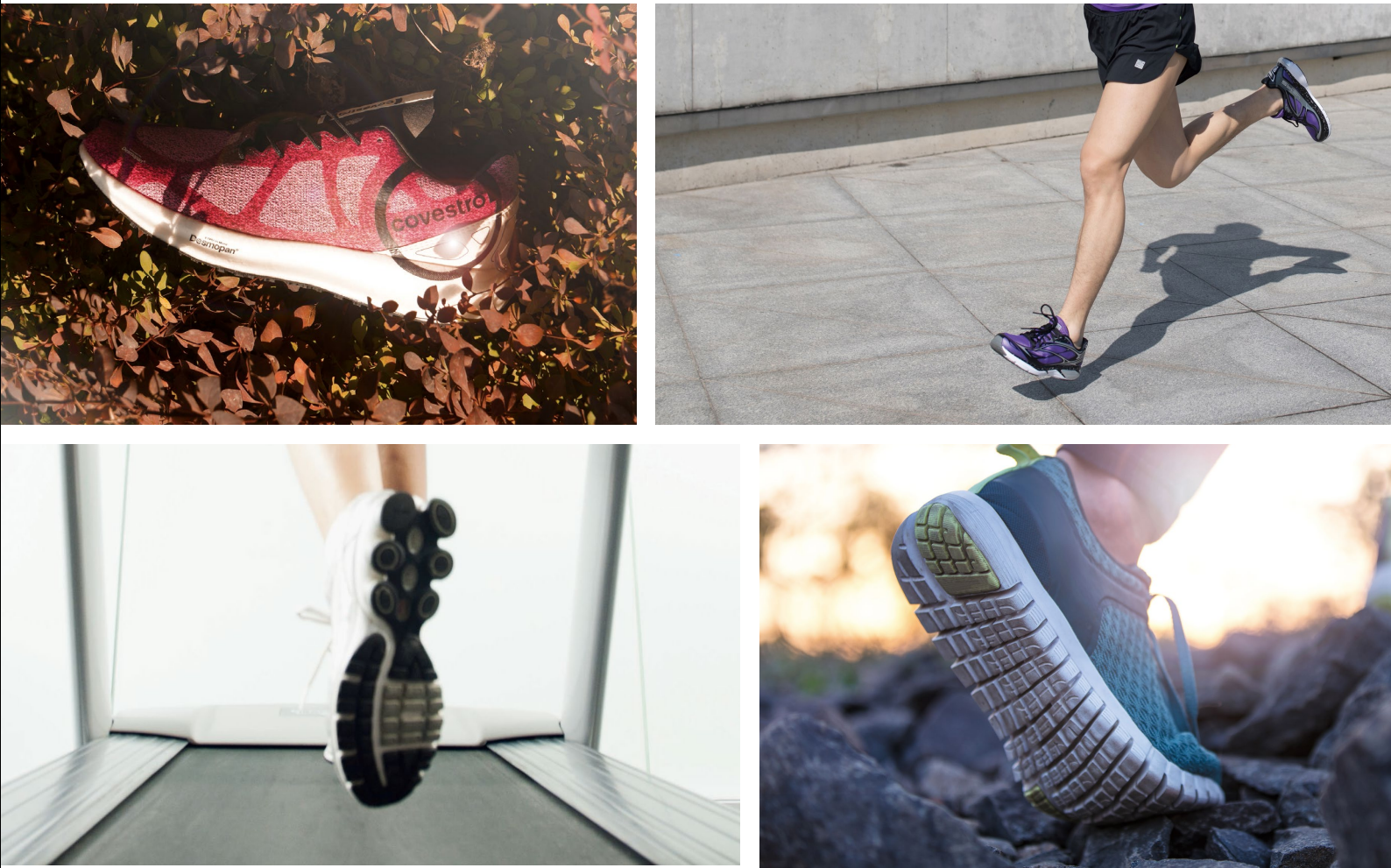
Covestro TPU Bridge the gap

TPU can be categorized as high grade ThermoPlastic Elastomer (TPE), bridging between rubber and traditional thermoplastics.





Experience a new level of footwear performance with TPU material



Our broad portfolio can impart a variety of properties including:

- **Exceptional Resistance**
To weathering, abrasion, oils, greases and solvents
- **Sustainable Solution**
Combines bio-based and recyclable, reducing environmental impact
- **Excellent cushioning**
Provide excellent resilience while very low compression set
- **Compatible to paints, solvent or water-borne primer and adhesive**
- **Withstand repeated flexing and pulling, excellent resistance to abrasion**
- **More design freedom**
More choices on transparency and colorways

TPU OUTSOLE

Elevate Outsole Performance:

Covestro TPU Solution Competes with Rubber, Delivering Exceptional Performance

Our polyester-based TPU solution offers a range of benefits for outsole applications, deliver unparalleled performance, comfort, and durability. With our manufacturing facilities located in Taiwan, we are strategically positioned to serve the needs of global footwear manufacturers efficiently.

Softness and
comfort

Experience
exceptional comfort
without plasticizers

Low abrasion
loss at a wide
range of
temperatures

Ensures long-lasting
performance

Good slip
resistance

Provides stability and safety
on various surfaces

Excellent
cushioning
and impact
resistance

Along with good
puncture resistance

Cost-
effective
solution

Without compromising
on quality

High
transparency
and a broad
range of color
options

For design flexibility

Cement
friendly

Compatible with common
solvent or water-borne primer
and adhesives

Higher
productivity

Much faster cycle time via
injection molding (versus
compression molding)

Slip Resistance

SATRA TM144 Test:
TPU 1065AU SATRA slip resistance close to Rubber

Property	Measurement	TPU Covestro 1065AU	Normal rubber
Slip resistance	SATRA TM144 (Dry)	1.02	1.00
	SATRA TM144 (Wet)	0.51	0.52

SATRA TM144 Test:
Levels of slip risk

Value	Risk of slip
0.1	Very high risk
0.2	High risk
0.3	Threshold of acceptable
0.6	High slip resistance
1.2	High risk of stumbling

Pattern of slip measurement:

- Covestro developed an injection mold
- Pattern of inject sole: international standard SFC sole design



DIN abrasion loss at elevated temperature

Property	Measurement	TPU Covestro 1065AU	Normal rubber
Abrasion	Abrasion (23°C)	15	110
Heat abrasion	Abrasion (50°C)	14	109
	Abrasion (60°C)	25	100
	Abrasion (70°C)	40	92
	Abrasion (80°C)	60	86
	Abrasion (90°C)	85	85
	Abrasion (100°C)	120	99

- Heat abrasion test was done by Covestro **internal test** method and equipment
- Test equipment use **DIN abrasion test machine**, the roller can be electrical heated, from **23 to 150°C**

Properties of Desmopan® 1000 series

Property	Standard	Unit	Desmopan® for injected outsole		
			1065AU	1070AU	1075AU
Shore hardness, method A	ISO 868	--	67	70	76
Ultimate tensile strength	DIN 53504	MPa	30	35	30
Strain at break	DIN 53504	%	800	750	680
Stress at 100 % strain	DIN 53504	MPa	2.5	2.8	4.0
Stress at 300 % strain	DIN 53504	MPa	5.0	5.8	8.5
Abrasion resistance	ISO 4649, Method B	mm³	15	20	25
Tear propagation resistance	ISO 34-1	kN/m	75	85	105
Density	ISO 1183-1	g/m³	1.206	1.209	1.198

ETPU

Covestro aliphatic TPU products For ETPU midsole

Covestro's ETPU deliver exceptional elasticity, resilience, and durability, exhibits superior energy return, enabling products to maintain their cushioning and impact resistance over an extended lifetime. Additionally, ETPU's lightweight and high-strength characteristics make it an attractive choice for applications where weight reduction and structural integrity are critical.

Fossil based

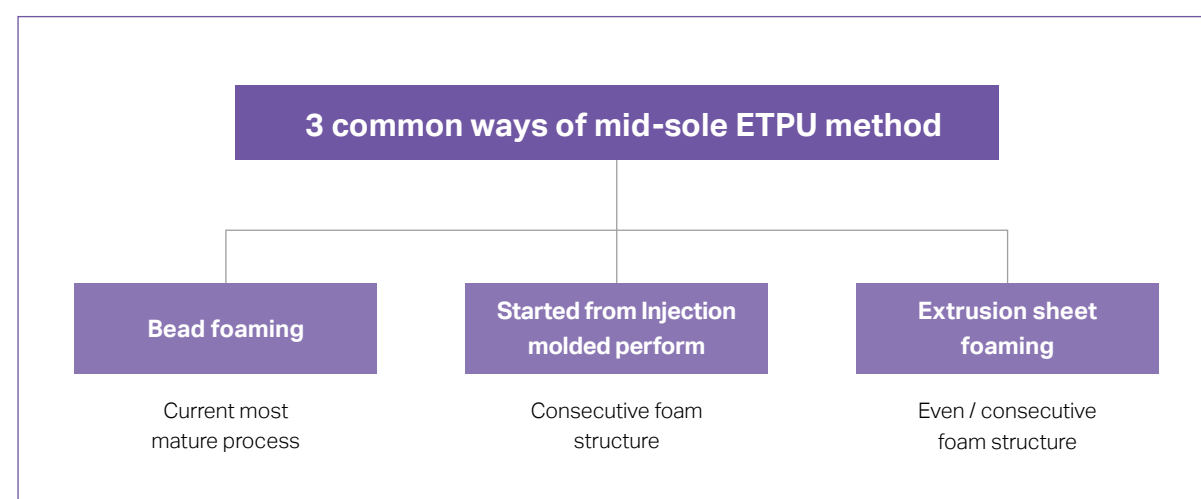
- **High performance Aliphatic/PCL grade**
83090AU DPS302
- **Aliphatic / Ester grade**
83085AU DPS301
83095AU DPS301 (high hardness, developing)

Bio-based

- **Aliphatic / Ester grade**
DPCQ83085AU EC DPS301 (bio 30-50%)
DPCQ83095AU EC DPS301 (bio 30-50%)
(developing)



ETPU by SCF (Super Critical Foaming) method



Test Item	Test method	UNIT	Covestro 83090A	Covestro 83085A
Density	ISO 1183-1	g/cm ³	1.12	1.15
Hardness	ISO 868	Shore A (1s)	92	88
Hardness	ISO 868	Shore D (1s)	38	---
Tear Strength	ISO 34-1	N/mm	168	147
Color Date	YI	-	-5.3	-4.5
MVR (5min/10kg/200°C)			12.7	22

Covestro TPU tear strength is higher

Covestro TPU melt strength is higher

TPU SYNTHETIC LEATHER

Experience the beauty and functionality of our synthetic leather while contributing to a more sustainable future

Sustainable Choice

Our TPU synthetic leather is made from thermoplastics, making it fully recyclable and environmentally friendly.

Premium Look and Feel

With a leather-like grain and touch, our TPU synthetic leather offers a high-end appearance and exceptional touch.



Ethical Sourcing

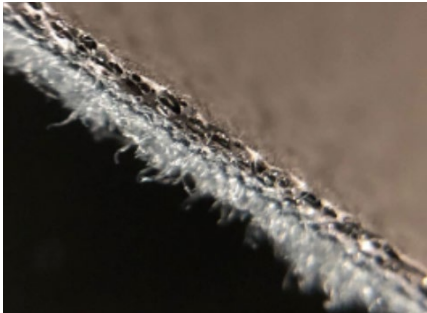
Our synthetic leather is of non-animal origin, providing a cruelty-free alternative to traditional leather.

Solvent and Dye-Free Manufacturing

Our manufacturing process is free from solvents and dyes, ensuring a cleaner and more sustainable production.

Bio-based Option

We also offer a bio-based option for our TPU synthetic leather, further reducing its environmental impact.



Choose TPU synthetic leather for a sustainable, premium, and ethical material that meets your design and performance needs.

TPU NON-WOVEN

Enhance performance and design with
TPU Non-Woven

Exceptional
Elasticity

Enjoy superior elasticity
for a comfortable and
flexible fit

Enhanced
Breathability

Allowing for a more
comfortable and sweat-
free wearing experience

High Tensile
Strength

Benefit from impressive
strength, ensuring
durability and longevity

Outstanding
Wear
Resistance

For long-lasting
performance

Pleasing
Haptic
Experience

Enjoy a delightful
tactile feel

Hydrolysis
Resistance

Ensuring performance in
various environments



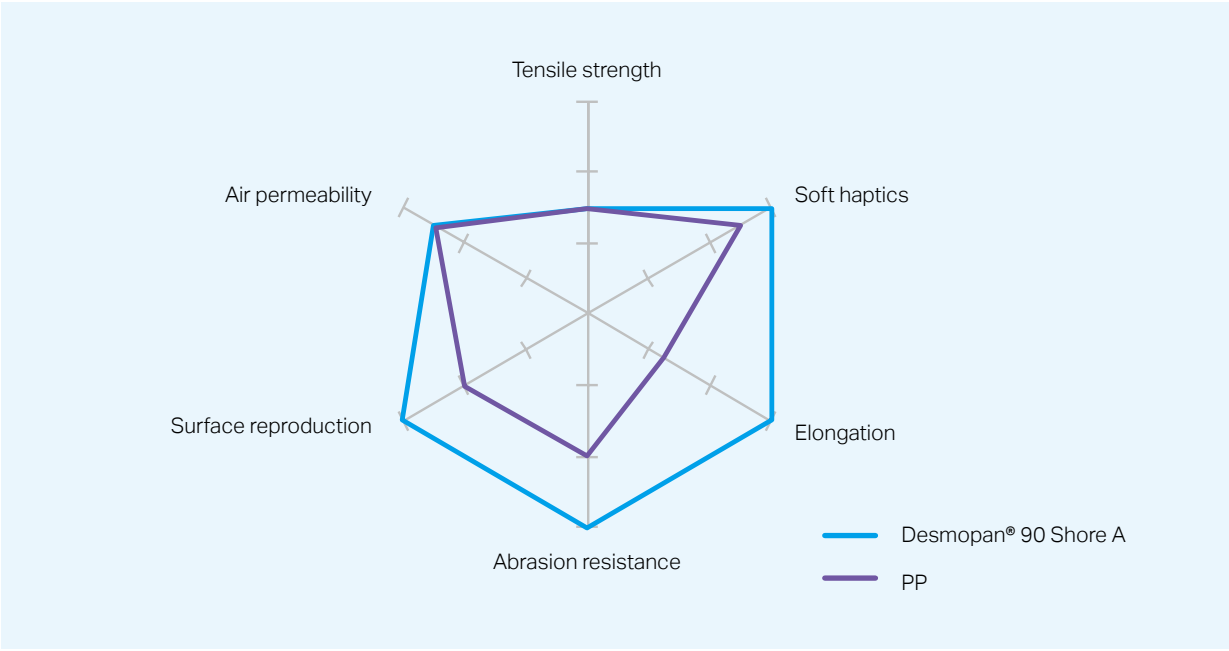
Possible as various lining
materials in fabric construction



Non-Woven made of Desmopan®

General comparison to other solutions

Material	Process	GSM	Tensile strength [MPa] MD/CD	Elongation [%]	Air Permeability [l/s m²] [200Pa]
TPU	Melt blown	100 gsm	54 / 49	340 - 348	255
PP	Melt blown	100 gsm	33 / 37	43 - 55	250



TPU SUSTAINABLE SOLUTION

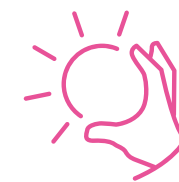
Progress towards more sustainability Further milestones achieved



ISCC PLUS

16

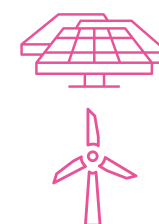
Sites in APAC, NA and
EMLA ISCC+ certified



Renewable Energy

16%

Share of global electricity use



Electricity supply contracts (PPAs)

First major contract for
supply with renewable
energy in US market



Circular Economy

Development of chemical
recycling technologies for
MDI, TDI and PC

Unlock more possibilities for sustainable footwear by Covestro TPU



BIO-BASED

Desmopan® CQ EC Series with up to 60% carbon content from bio- based raw materials



POST INDUSTRIAL RECYCLING

Desmopan® CQ RC Series with 30% to 100% of recycled content



POST CONSUMER RECYCLING

Several projects with the aim to develop new business models with partnerships along the value chain in order to close the loop



MASS-BALANCE

Desmopan® CQ MB Series with bio- and bio circular- feedstock attributed via mass-balance

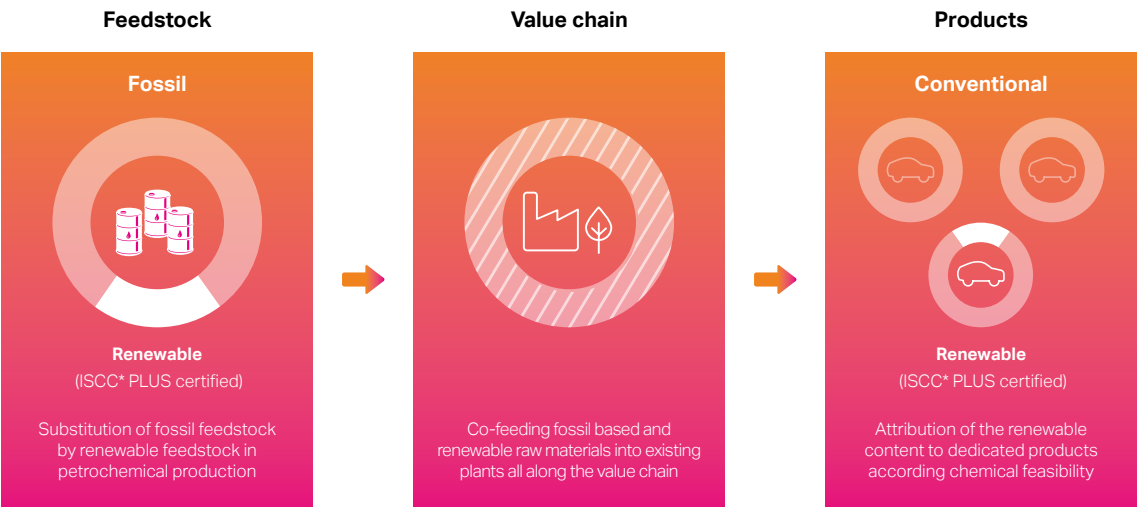
Mass Balance:
The game changing approach to reduce the carbon footprint

Mass Balancing is about mixing **fossil and renewable, recycled or waste-based feedstock** in **existing manufacturing systems** while keeping track of their quantities through detailed verified bookkeeping and allocate them to specific end products

The actual renewable molecules in the product may not be recycled or renewable, because **it might not be physically traceable** throughout the production processes. The recycled or renewable used feedstock **is attributed** to the end product via a mathematical algorithm that is verified and certified by a 3rd party (e.g., like ISCC PLUS), in a fully transparent and auditable way.



Easy & fast solution to implement at zero technical risk



* ISCC=international sustainability & carbon certification

ISCC Plus Certificate of COVESTRO TPU Sites in APAC

- ChangHua site in Taiwan
- Shenzhen site in China



TPU mass balance solution:
Many possibilities that all lead towards one goal

 Desmopan® CQ MBC/ MBB

Desmopan® CQ MB series as a **seamless integrated solution** based on **bio- & bio-circular-attributed content** sourced from renewable raw material (e.g. used cooking oil, PFAD*) with up to **55%** sustainable share from **biomass*** and up to **30% CO₂ reduction***

* In comparison with fossil-based equivalent grade

Embrace sustainability and quality with our mass balance solutions



Smaller footprint

Allocate alternative raw materials to reduce your carbon footprint.



Easy, fast solution

Implement our drop-in solutions easily within your production process.



Peace of mind

Operate under the same processing conditions, with no technical risk.



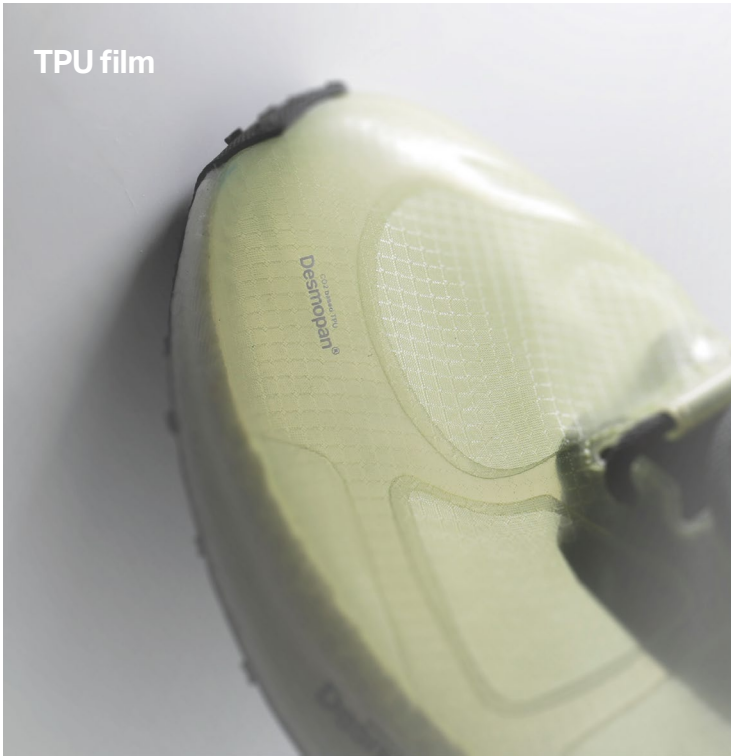
Consistent quality

Benefit from the same high quality as with conventional products.



Available now

Get started today with drop-in mass balance solutions, also in large quantities.



Empowers mono-material shoes for seamless recycling

Our versatile thermoplastic polyurethane (TPU) raw material allows for the creation of mono-material shoes, eliminating the need for disassembly during recycling. Unlike traditional shoes made with multiple

incompatible materials, mono-material TPU shoes can be easily recycled without sorting or separating components.

Mono-material concept powered by Desmopan®

With Covestro TPU, developers can tap into a comprehensive toolbox of components, enabling the creation of **fiber, film, ETPU foam, synthetic leather, non-woven** all derived from this single material.

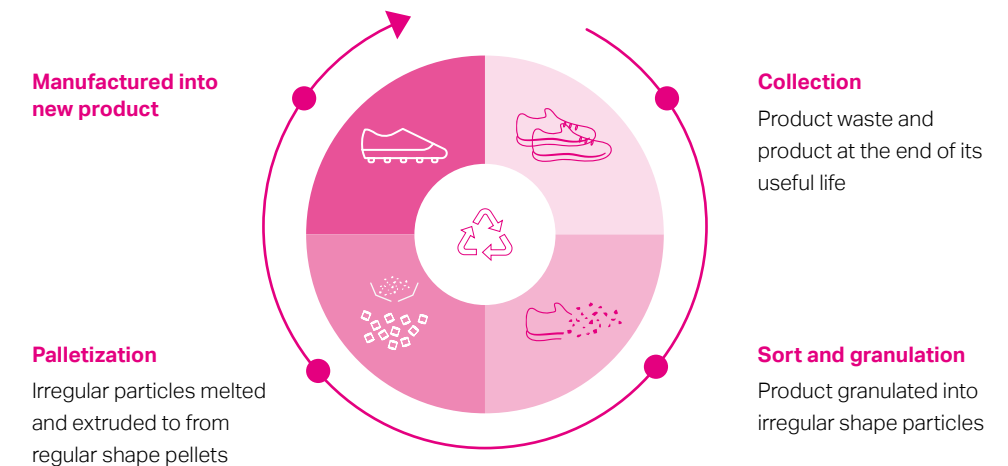
Covestro encourages collaboration across the value chain to develop recycling concepts for TPU waste generated during shoe manufacturing and from end-user products. We provide technical support on recycling processes and collaborate with value-chain partners to reuse waste-based TPU materials, facilitating closed-loop recycling solutions.

Join the movement towards a circular economy and simplify the shoe recycling process with Covestro's mono-material TPU solution!



Fully Recyclable: Closed loop PCR system for footwear

Mono-material approach enables a closed-loop recycling system for end-of-life shoes. These shoes are crafted from a single, recyclable thermoplastic polyurethane (TPU) material, at the end of their life cycle, shoes can be returned, ground down, and melted, allowing 100% of the material to be remanufactured into a new pair of shoe.



COVESTRO TPU PRODUCT RANGE

Footwear Portfolio Overview

		General Injection	Soft	Transparent	Super Transparent	Extrusion	Aliphatic	Sustainability
Hardness	35A							
	55A							
	65A							
	75A							
	85A							
	95A/45D							
	98A/50D							
	55D							
	60D							
	65D							
	70D							
	75D							

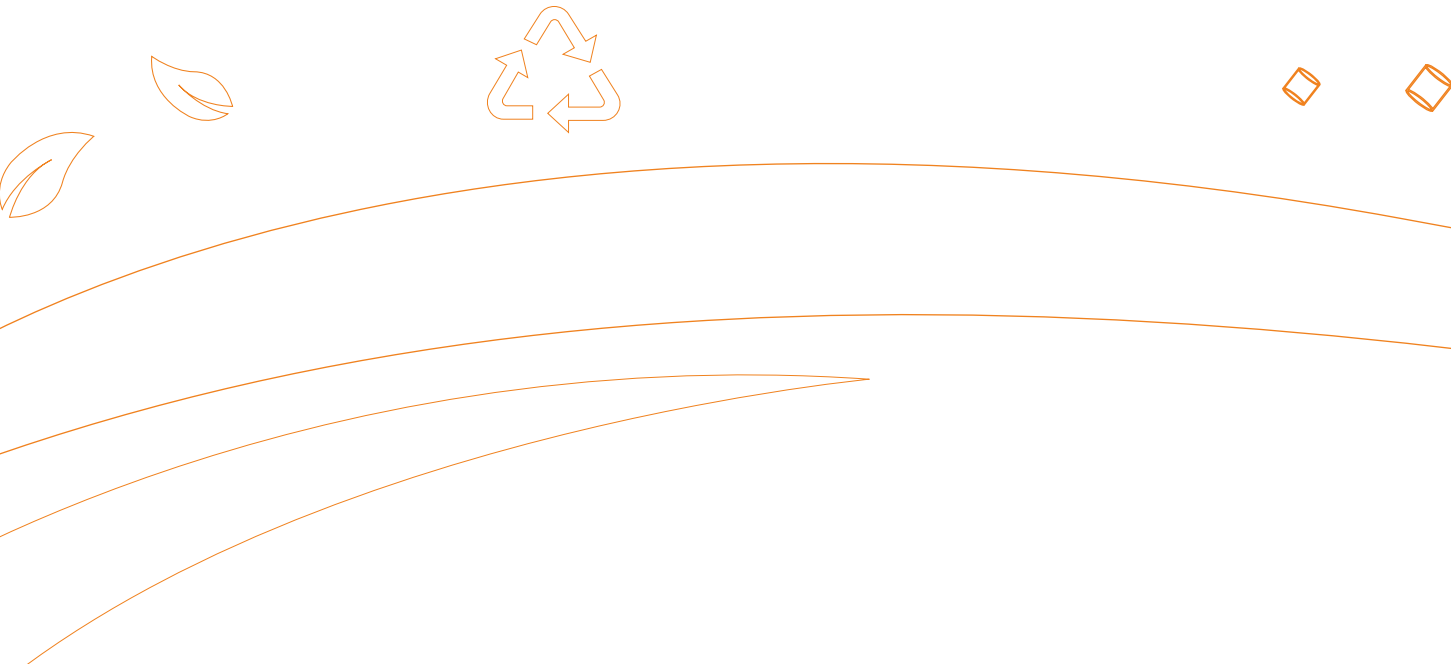


General Injection

Property	Mechanical Properties (23°C, 50% R.H.)								Other Property	Molding Conditions (mold temperature: 20~40°C)		Remark
	Shore Hardness	Shore Hardness	Ultimate tensile strength	Strain at break	Stress at 100% strain	Stress at 300% strain	Abrasion resistance	Tear propagation resistance	Density	Maximum drying temperature	Injection molding melt temperature	
Test Condition	Method A	Method D	200 mm/min.	200 mm/min.	200 mm/min.	200 mm/min.	-	500 mm/min.	-	-	-	
Unit	-	-	MPa	%	MPa	MPa	mm ³	kN/m	kg/m ³	°C	°C	
Standard	ISO 868	ISO 868	DIN 53504	DIN 53504	DIN 53504	DIN 53504	ISO 4649 (method B)	ISO 34-1	ISO 1183-1			
U.75APU10	78	-	32	660	3.6	7.5	80	90	1150	90	175 ~ 195	
U.80APU10	82	-	36	600	4.4	9.0	70	100	1155	100	175 ~ 195	
U.85AU10	88	-	55	580	6.4	12.0	60	120	1220	100	185 ~ 205	
U.90AU10	91	-	58	560	7.7	16.0	50	145	1223	100	195 ~ 215	
U.95AU10	93	48	55	480	11.0	25.0	55	145	1230	110	200 ~ 220	
U.98AU20	-	54	46	420	16.0	33.0	65	180	1237	110	205 ~ 225	
DP.8785A	88	-	48	520	6.2	16.0	60	130	1199	100	185 ~ 205	Cold flex
DP.8792A	91	45	56	500	7.8	22.0	35	140	1201	110	195 ~ 215	Cold flex
DP.8795A	95	49	64	430	12.0	35.0	40	170	1220	110	200 ~ 220	Cold flex
DP.8798A	-	54	62	440	14.0	38.0	50	175	1218	110	205 ~ 225	Cold flex
U.H-60D20	-	61	56	400	20.0	42.0	40	225	1240	110	210 ~ 230	
UD-64D20	-	64	66	400	23.0	45.0	40	270	1230	110	210 ~ 230	
U.H-64D20	-	65	60	400	24.0	44.0	45	260	1240	110	210 ~ 230	
U.H-71D20	-	69	64	370	28.0	52.0	50	280	1240	110	215 ~ 235	

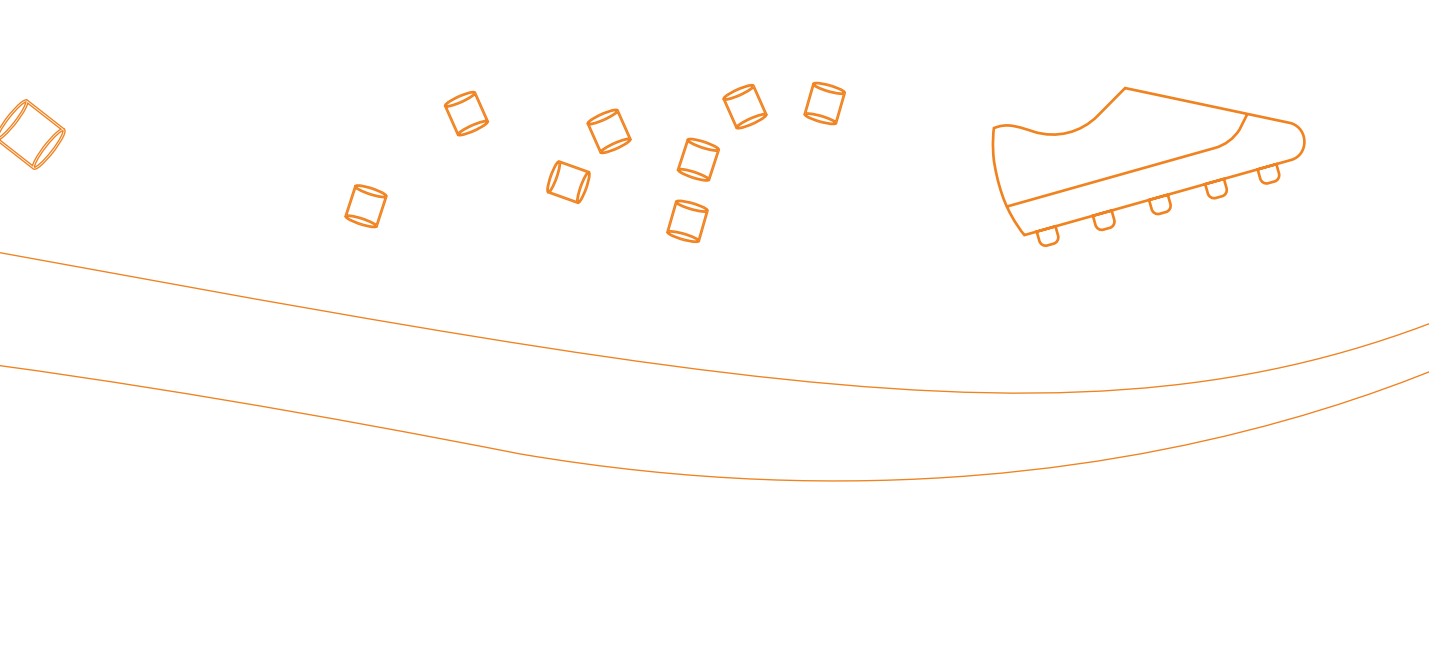
Soft

	Mechanical Properties (23°C, 50% R.H.)								Other Property	Molding Conditions (mold temperature: 20~40°C)		Remark
Property	Shore Hardness	Shore Hardness	Ultimate tensile strength	Strain at break	Stress at 100% strain	Stress at 300% strain	Abrasion resistance	Tear propagation resistance	Density	Maximum drying temperature	Injection molding melt temperature	
Test Condition	Method A	Method D	200 mm/min.	200 mm/min.	200 mm/min.	200 mm/min.	-	500 mm/min.	-	-	-	
Unit	-	-	MPa	%	MPa	MPa	mm ³	kN/m	kg/m ³	°C	°C	
Standard	ISO 868	ISO 868	DIN 53504	DIN 53504	DIN 53504	DIN 53504	ISO 4649 (method B)	ISO 34-1	ISO 1183-1			
DP1035AU	48	42	12	1100	1.5	3.2	180	58	1184	70	160 ~ 180	
DP1055AU	55	51	15	1100	1.8	3.6	100	60	1192	80	160 ~ 200	
DP1060AU	63	-	16	800	3.0	6.0	60	70	1200	70	175 ~ 195	
DP1065AU	67	-	25	800	3.4	6.4	40	80	1204	80	175 ~ 195	
DP1070AU	70	-	34	680	2.8	6.0	20	95	1209	80	170 ~ 190	
DP1075AU	74	-	38	750	3.4	6.8	20	100	1207	90	180 ~ 220	
DP9055AU	56	-	10	600	2.4	5.4	250	40	1075	80	175 ~ 195	Ether base
DP9068AU	71	-	30	600	4	10	80	110	1071	80	185 ~ 205	Ether base
US-65AU10	70	-	24	880	2.7	5.2	120	60	1150	80	155 ~ 175	Caprolactone base
US-75AU10	78	-	26	800	3.4	6.2	80	70	1190	90	160 ~ 195	Caprolactone base



Aliphatic

	Mechanical Properties (23°C, 50% R.H.)								Other Property	Molding Conditions (mold temperature: 20~40°C)		Remark
Property	Shore Hardness	Shore Hardness	Ultimate tensile strength	Strain at break	Stress at 100% strain	Stress at 300% strain	Abrasion resistance	Tear propagation resistance	Density	Maximum drying temperature	Injection molding melt temperature	
Test Condition	Method A	Method D	200 mm/min.	200 mm/min.	200 mm/min.	200 mm/min.	-	500 mm/min.	-	-	-	
Unit	-	-	MPa	%	MPa	MPa	mm ³	kN/m	kg/m ³	°C	°C	
Standard	ISO 868	ISO 868	DIN 53504	DIN 53504	DIN 53504	DIN 53504	ISO 4649 (method B)	ISO 34-1	ISO 1183-1			
DP87370AU	78	-	62	410	3.5	36.0	45	80	1130	60	170 ~ 190	
DP83085A	89	-	30	580	6.8	15.0	35	150	1153	100	160 ~ 210	
DP83090A	92	38	30	450	12.0	22.0	30	165	1120	100	170 ~ 200	
DP83095A	93	48	42	470	16.0	30.0	30	130	1154	110	180 ~ 200	
DPCQ83095A	93	43	40	440	15.0	29.0	30	150	1151	110	160 ~ 190	30% bio-content
DP89056D	-	59	36	180	30.0	-	35	190	1140	110	205 ~ 235	



Transparent

	Mechanical Properties (23°C, 50% R.H.)								Other Property	Molding Conditions (mold temperature: 20~40°C)		Remark
Property	Shore Hardness	Shore Hardness	Ultimate tensile strength	Strain at break	Stress at 100% strain	Stress at 300% strain	Abrasion resistance	Tear propagation resistance	Density	Maximum drying temperature	Injection molding melt temperature	
Test Condition	Method A	Method D	200 mm/min.	200 mm/min.	200 mm/min.	200 mm/min.	-	500 mm/min.	-	-	-	
Unit	-	-	MPa	%	MPa	MPa	mm ³	kN/m	kg/m ³	°C	°C	
Standard	ISO 868	ISO 868	DIN 53504	DIN 53504	DIN 53504	DIN 53504	ISO 4649 (method B)	ISO 34-1	ISO 1183-1			
UE-85AU10	86	-	48	560	6.0	13.0	40	105	1110	100	185 ~ 205	Ether base
UE-90AU10	90	-	48	580	7.5	15.0	55	130	1120	100	195 ~ 215	Ether base
UE-95AU10	93	50	50	420	13.0	33.0	45	130	1140	110	195 ~ 215	Ether base
UE-98AU10	-	57	46	360	20.0	36.0	50	190	1160	110	200 ~ 220	Ether base
UT-90AU10	92	-	50	500	7.6	15.0	70	100	1200	100	185 ~ 205	
UT-95AU10	92	45	50	480	9.0	20.0	50	130	1210	110	195 ~ 215	
UT-98AU10	96	55	60	450	15.0	36.0	60	190	1220	110	200 ~ 220	
UT-60DU10	-	61	50	380	20.0	40.0	45	230	1230	110	205 ~ 225	
UT-64DU10	-	64	50	380	21.0	42.0	50	230	1230	110	205 ~ 225	
UT-71DU10	-	69	54	380	25.0	44.0	50	260	1230	110	210 ~ 230	
UT-74DU10	-	74	48	300	30.0	40.0	40	300	1240	110	215 ~ 235	



Super Transparent

Good transparency at thicker part

	Mechanical Properties (23°C, 50% R.H.)								Other Property	Molding Conditions (mold temperature: 20~40°C)		Remark
Property	Shore Hardness	Shore Hardness	Ultimate tensile strength	Strain at break	Stress at 100% strain	Stress at 300% strain	Abrasion resistance	Tear propagation resistance	Density	Maximum drying temperature	Injection molding melt temperature	
Test Condition	Method A	Method D	200 mm/min.	200 mm/min.	200 mm/min.	200 mm/min.	-	500 mm/min.	-	-	-	
Unit	-	-	MPa	%	MPa	MPa	mm ³	kN/m	kg/m ³	°C	°C	
Standard	ISO 868	ISO 868	DIN 53504	DIN 53504	DIN 53504	DIN 53504	ISO 4649 (method B)	ISO 34-1	ISO 1183-1			
UTC-70AU10	70	-	25	600	3.6	9.0	120	85	1152	50	130 ~ 150	Caprolactone base
UTC-90AU10	90	-	58	520	8.0	22.0	55	140	1165	100	195 ~ 215	Caprolactone base
UTC-95AU10	91	47	54	440	10.0	30.0	55	135	1181	110	200 ~ 220	Caprolactone base
UTC-98AU10	-	56	56	440	14.0	36.0	50	165	1190	110	205 ~ 225	Caprolactone base
UTX-95AU10	92	49	52	400	12.0	36.0	45	145	1217	110	195 ~ 215	
UTX-66DU10	-	64	60	380	24.0	45.0	45	240	1222	110	210 ~ 230	
UTX-71DU10	-	71	58	330	30.0	50.0	45	280	1222	110	220 ~ 240	
DP3685AU	86	-	50	500	5.4	12.0	45	80	1200	100	180 ~ 200	
DP3690AU	92	-	60	450	8.5	22.0	45	115	1200	100	190 ~ 210	
DP3695AU	93	50	58	460	10.0	28.0	45	145	1220	110	195 ~ 215	
DP3698AU	95	52	64	450	14.0	36.0	45	180	1220	110	200 ~ 220	
DP3660DU	-	62	66	380	22.0	46.0	40	240	1230	110	210 ~ 230	
DP3665DU	-	69	70	380	28.0	50.0	40	280	1230	110	210 ~ 230	
DP3674DU	-	74	52	320	34.0	45.0	45	310	1240	110	215 ~ 235	
DP3680D	-	83	72	60	-	-	-	-	1260	95	230 ~ 250	

Extrusion

	Mechanical Properties (23°C, 50% R.H.)								Other Property	Extrusion Conditions (mold temperature: 20~40°C)		Remark
Property	Shore Hardness	Shore Hardness	Ultimate tensile strength	Strain at break	Stress at 100% strain	Stress at 300% strain	Abrasion resistance	Tear propagation resistance	Density	Maximum drying temperature	Extrusion melt temperature	
Test Condition	Method A	Method D	200 mm/min.	200 mm/min.	200 mm/min.	200 mm/min.	-	500 mm/min.	-	-	-	
Unit	-	-	MPa	%	MPa	MPa	mm ³	kN/m	kg/m ³	°C	°C	
Standard	ISO 868	ISO 868	DIN 53504	DIN 53504	DIN 53504	DIN 53504	ISO 4649 (method B)	ISO 34-1	ISO 1183-1			
UT7-70AU10	69	-	18	950	2.6	4.5	140	55	1180	70	130 ~ 150	
UT7-80AEU10	79	-	32	640	3.5	7.5	85	100	1190	80	175 ~ 195	
UT7-85AU10	86	-	40	600	5.6	11	85	120	1206	100	175 ~ 195	
UT7-90AU10	90	-	48	540	7.2	15	60	135	1210	100	200 ~ 220	
UT7-95AU10	95	50	34	400	13	25	100	140	1222	110	190 ~ 210	
UT7-98AU10	-	54	40	370	16	34	120	160	1225	110	185 ~ 205	
UT6-85AU10	86	-	48	520	5.4	14	40	100	1200	100	190 ~ 220	
UT6-90AU10	90	-	52	480	6.5	16	40	100	1200	100	195 ~ 225	
DP9380AU	79	-	40	680	4.0	7.8	60	95	1100	100	175 ~ 205	Ether base
DP9385AU	87	-	46	540	6.2	12.5	55	120	1112	100	175 ~ 205	Ether base
DP9390AU	90	-	52	520	7.8	18.0	60	145	1127	100	185 ~ 205	Ether base
DP9395AU	95	49	52	400	16.0	36.0	50	150	1144	110	185 ~ 215	Ether base



CQ (Sustainable Solution)

Low carbon footprint

	Mechanical Properties (23°C, 50% R.H.)								Other Property	Molding Conditions (mold temperature: 20~40°C)		Sustainable Content	Remark
Property	Shore Hardness	Shore Hardness	Ultimate tensile strength	Strain at break	Stress at 100% strain	Stress at 300% strain	Abrasion resistance	Tear propagation resistance	Density	Maximum drying temperature	Extrusion melt temperature		
Test Condition	Method A	Method D	200 mm/min.	200 mm/min.	200 mm/min.	200 mm/min.	-	500 mm/min.	-	-	-		
Unit	-	-	MPa	%	MPa	MPa	mm ³	kN/m	kg/m ³	°C	°C	%	
Standard	ISO 868	ISO 868	DIN 53504	DIN 53504	DIN 53504	DIN 53504	ISO 4649 (method B)	ISO 34-1	ISO 1183-1				
DPCQ1065AU MBC300V2	67	-	25	800	3.4	6.4	40	80	1204	80	175 ~ 195	53	Bio-attributed
DPCQ1075AU MBC300V2	74	-	38	750	3.4	6.8	20	100	1207	90	180 ~ 220	59	Bio-attributed
UCQ85AU10 MBB	88	-	55	580	6.4	12.0	60	120	1220	100	185 ~ 205	18	Bio-attributed
DPCQ8785A MBC105V2	88	-	48	520	6.2	16.0	60	130	1199	100	185 ~ 205	55	Bio-attributed
UCQ95AU10 MBB	93	48	55	480	11.0	25.0	55	145	1230	110	200 ~ 220	22	Bio-attributed
DPCQ3695AU MBB101	93	50	58	460	10.0	28.0	45	145	1220	110	195 ~ 215	22	Bio-attributed
DPCQ8795A MBC305V2	95	49	64	430	12.0	35.0	40	170	1220	110	200 ~ 220	53	Bio-attributed
UCQ95AU10 MBCV2	93	48	55	480	11.0	25.0	55	145	1230	110	200 ~ 220	55	Bio-attributed
UCQT7-85AU10 MBC302V2	86	-	40	600	5.6	11.0	85	120	1206	100	165 ~ 185	57	Bio-attributed
UCQT7-90AU10 MBCV2	90	-	48	540	7.2	15.0	60	135	1210	100	185 ~ 205	56	Bio-attributed
UCQT7-95AU10 MBC304V2	95	50	42	380	14.0	32.0	80	150	1224	110	190 ~ 210	54	Bio-attributed
UCQH-71DU10 MBC650V2	-	71	60	340	32.0	52.0	45	300	1236	110	220 ~ 240	49	Bio-attributed
DPCQ3085AU RC30	85	-	17	830	3.5	8.3	200	67	1210	90	180 ~ 200	30	Recycle content
DPCQ3095AU RC50	95	48	45	500	10.0	18.0	60	135	1220	100	195 ~ 215	50	Recycle content
DPCQ3095AU RC100	96	50	32	420	13.5	22.0	45	125	1210	110	195 ~ 215	100	Recycle content
DRCQ33085AUDEC	86	-	46	640	6.0	11.0	65	125	1240	110	190 ~ 210	39	Bio-carbon ratio
DRCQ33095AUDEC	96	53	56	380	16.0	32.0	60	170	1260	110	200 ~ 220	35	Bio-carbon ratio
DRCQ33060DUEC	-	63	48	340	26.0	45.0	55	230	1273	110	205 ~ 225	42	Bio-carbon ratio