

RenPIM[®]

Vacuum grade casting systems

Fast curing 2-component Polyurethane casting system

A fast curing 2-component Polyurethane casting system for use in vacuum casting equipment to simulate the appearance and physical properties of a wide range of engineering thermoplastics for rapid prototyping or short series production.

Replicating different types of thermoplastics ABS, HDPE, PP, Rubber

Product Range At A Glance

Rubber Type

Ren[®]PIM 5281/5282/5283 Variable Shore A40-A90, pigmentable, easy to process

PE, PP Type

RenPIM[®] 5284 E-Modulus (660 MPa), HDT (97°C), High impact, able to simulate charnier effect

RenPIM[®] 5285 E-Modulus (1400 MPa), HDT (120°C)

RenPIM[®] 5234 E-Modulus (1760 MPa), HDT (89°C), white, pigmentable

ABS Type

RenPIM[®] 5286 E-Modulus (2000 MPa), HDT (140°C), black, easy to mould

RenPIM[®] 5287 E-Modulus (2400 MPa), HDT (116°C), transparent, UV stabilised

UL 94 V0 Type

RenPIM[®] 5289 UL94 V0, E-Modulus (3500 MPa), HDT (84°C)

Rapid prototyping & short series production

- Design reviews
- As high quality functional prototypes
- For form, fit and function testing
- Consumer testing
- Market research
- Production parts

Advantages

- RenPIM[®] Vacuum Grade allows you to produce thermoplastic like parts **without the high cost of steel moulds and press.**
- **Parts are made within minutes** at low cost giving you time and cost savings.
- The **high quality parts** made from RenPIM[®] Vacuum Grade are dimensionally stable and accurately reproduce fine surface detail and textures.
- You can choose materials from a **clear and concise product range** at competitive prices to suit your requirements.
- The **products are well proven**, thoroughly tested and endorsed by MCP.

Want to know more

Product samples are available on request.

Application equipment

A list of recommended suppliers is available on request.



BUBBLES LAMPS
Designed by Sandra Ancelot et Thomas Bleicher. Prototype and mould.
AEF Design

REGULATOR OF OXYGEN TANK
Functionnal parts.
Example of vacuum casting, high precision parts, including different types of products ABS and rubber like.
AEF Design for Fenzy

RenPIM®

Vacuum grade casting systems

Product	TYPICAL PRODUCT DATA					TYPICAL CURED PROPERTIES				
	Colour	Mix Ratio (pbw)	Pot Life 100 g at 40°C (min)	Demould. Time at 70°C (hr)	Max. Layer Thickness (mm)	Hardness Shore ISO 868	Deflec. Temp. ISO 75 (°C)	Tens. Strength ISO 527 (MPa)	Flex. Modulus ISO 527 (MPa)	Elong at Break ISO 527 (%)

Rubber Type

Low tack, good resilient, pigmentable

RenPIM® VG 5281 Polyol / 5281 Isocyanate	Light amber	100:25	5-10	2	10	40A	NA	0.75	–	80
RenPIM® VG 5281 Polyol / 5281 Isocyanate	Light amber	100:30	5-10	2	10	50A	NA	1.67	–	72
RenPIM® VG 5282 Polyol / 5281 Isocyanate	Light amber	100:35	5-10	2	10	60A	NA	2.62	–	92
RenPIM® VG 5282 Polyol / 5281 Isocyanate	Light amber	100:40	5-10	2	10	70A	NA	4.29	–	85
RenPIM® VG 5281 Polyol / 5283 Polyol / 5281 Isocyanate	Light amber	60:40:45	5-10	2	10	80A	NA	5.98	–	97
RenPIM® VG 5281 Polyol / 5283 Polyol / 5281 Isocyanate	Light amber	40:60:55	5-10	2	10	90A	NA	12.88	–	139
RenPIM® VG 5283 Polyol / 5281 Isocyanate	White	100:70	5-10	2	10	> 90A	NA	22.41	441	128

PE, PP Type

Pigmentable, PP/ABS like

RenPIM® 5234 VG Polyol / 5234 Isocyanate	White	30:100	6*	0.75	5	79D	NA	45	1 450	12
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High impact resistant, good temperature resistant

RenPIM® 5284 VG Polyol / 5284 Isocyanate	Amber, semi transparent	32:100	13-16*	2	10	68D	97**	25	660	125
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High heat deflection, good flexibility

RenPIM® VG 5285 Polyol / 5285 Isocyanate	Black	80:100	10*	0.75	10	80D	120**	42	1 400	30
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ABS Type

High heat resistant, ABS-like

RenPIM® VG 5286 Polyol / 5286 Isocyanate	Black	100:150	6	0.75	10	80D	140**	70	2 000	14
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UV stabilised, ABS-like

RenPIM® VG 5287 Polyol / 5287 Isocyanate	Clear transparent	100:150	4-5	2	10	80D	116**	76	2 400	12
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UL 94 VO Type

Flame retardant grade, FAR 25 and UL 94 VO approved, ABS like

RenPIM® VG 5289 Polyol / 5289 Isocyanate	Brown	100:90	5-6	2	10	78D	84**	64	107	3
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* Room Temperature = 25°C • ** Properties after post cure

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