

Epic Vypur™ Dead Plate

Sample Application: Impact Bumper

Product: Premium Grade Polyurethane

Colour: Light Blue

Duro: 54A

Designation: PU, PUR (Cast Elastomeric Polyurethane)

Format: Slabs, sheets and bonded to steel

Damaging vibration and shock were required to be reduced in this mobile equipment application. Absorbing up to 90% of the impact energy and preventing it from being transmitted to the superstructure was a key factor in selecting Vypur™ Dead Plate.



A high-performance energy dissipative grade of polyurethane designed for applications where extreme impact absorption is required. Vypur™ Dead Plate converts up to 90% of impact energy into heat, which dissipates through the material into a metal backing plate.

Vypur™ Dead Plate cast polyurethanes are tough, strong rubber-like polymers which can be depended upon to retain their original shape and properties for a long service life. Cost effective and dependable, these elastomers combine some of the performance advantages of engineered plastics and metals along with the resiliency and flexibility of rubber.



Strong



Energy Dissipative



Impact Resistant

Core Advantages:

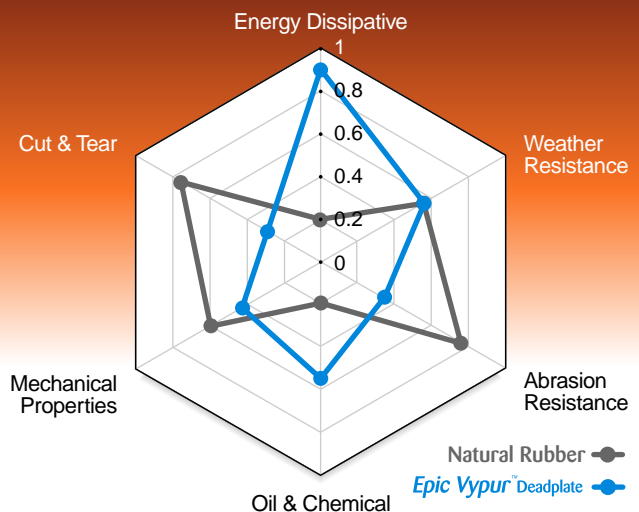
- ▶ Converts 90% of impact energy into dissipative heat
- ▶ Withstands incredible impact and shock loading
- ▶ Exceptional bond to steel and aluminum

Limitations:

- ▶ Avoid operation in the presence of water above +90°C as urethane can hydrolyse
- ▶ A cap of SVI95 is recommended for abrasion resistance

Typical Applications

- ▶ Impact pads
- ▶ Cushion pads
- ▶ Transfer plates
- ▶ Dissipator channels
- ▶ Load bars



Toll Free: 1.855.625.8800
www.EpicPolymer.com



Beyond Industrial Strength™

CANADA: Unit 2 – 19695 92A Avenue
 Langley, BC V1M 3B3

USA: 1901 Schurman Way
 Woodland, WA 98674

Epic Vypur™ Dead Plate

Premium Grade Polyurethane

Properties	Specification	Units	Typical Value
Grade			Dead Plate
Colour			Light Blue
Durometer (Hardness)	ASTM D 297	Shore "A"	54 +/-5
Specific Gravity	ASTM D 297	g/cc	1.24
Tensile Strength	ASTM D 412	psi	2400
100% Modulus	ASTM D 412	psi	170
Flexural Modulus, 1 in/min	ASTM D 412	psi	-
Ultimate Elongation	ASTM D 412	psi	170
Compression Set - 22 hr @ +70°C	ASTM D 395, Method B	%	350
Temperature Range		°C (°F)	-20° to +40°C (-4° to +104 °F)
Bell Brittle Point	ASTM D 746 - 13	°C (°F)	-
Bayshore Rebound		%	3
Notched Izod Impact	ASTM D 476	ft-lb/in	Flexed
Abrasion Resistance	DIN	mm ³	-
Tear Resistance, Initial	ASTM D 624, Die C	pli	200
Tear Resistance, Propogation	ASTM D 470	pli	14

Unless otherwise stated, all Epic sheet rubber is provided to standard RMA Rubber Tolerances.

Chemical Resistance

For detailed Chemical Resistance, please consult the Epic Polymer Material Chemical Compatibility Chart

Design Considerations:

Epic Polymer recommends contacting us directly for input on design considerations and engineering.

Ask us about our custom cutting, stamping and fabricating services: All sheet rubber products are available in many formats, including full rolls, sheets, cut- to-size strips and blocks as well as custom-fabricated and die-cut parts. Epic Polymer offers a quick-ship service to process in-stock sheet orders in as little as 24 hours if required.



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