



SUPER TOUGH

REINFORCED RUBBER

Stiffness and Tear Resistance

National Rubber Technologies Corp.'s Symar® Super Tough is a unique composite material. It consists of polyester and nylon fabric laminated to masticated rubber. As a result, Super Tough products have far greater stiffness and tear resistance properties than other materials.



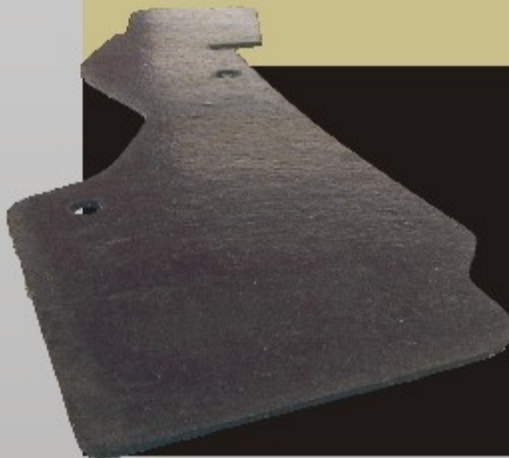
Durability

Symar® Super Tough's innovative properties allow thinner gauge parts to function in many extreme automotive and industrial applications. Symar® Super Tough is ideal for: Side guards, skirt boards, splash shields, liners, chutes, fender boards, and much more.



Savings

Super Tough's strength reduces the need for part thickness and as a result, weight and cost savings can be realized. Die cut Super Tough parts have stiffness that is equivalent to complex molded parts.



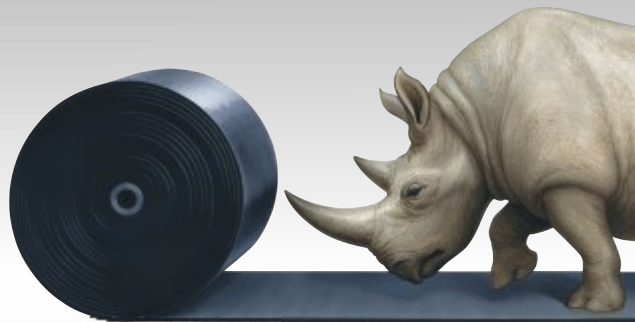
CUSTOMER SERVICE:
1-800-387-8501
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Symar® means
strong

Made with



SYMAR[®] SAYS
TOUGH
AS NAILS



SUPER TOUGH 1 & 2

Technical Data

DESCRIPTION:

A composite material, consisting of a polyester and nylon fabric laminated on one or both sides of masticated rubber. This material offers superior stiffness, tensile strength and tear resistance. Cost and weight savings opportunities are possible, where Syamar[®] Super Tough can replace a thicker rubber product.

SUPER TOUGH 2 SPECIFICATIONS:

SAE J 200 M 2AA 910 A14 C12 F17 G21 Z1 Z2 Z3

Z1 : Physical properties checked with grain

Z2 : Elongation with grain 15 % minimum.

Z3 : Material : Polyester/nylon rubber laminate

PHYSICAL PROPERTIES	TEST METHOD	SUPER TOUGH 1	SUPER TOUGH 2
Tensile Strength MPa, min (psi)	ASTM D412 Die C	with grain: 7 (1000) across grain: 4 (580)	with grain: 10 (1450) across grain: 5.5 (790)
Tear Strength kN/m, Min (PI)	ASTM D624 Die B	with grain: 40 (228) across grain: 60 (342)	with grain: 50 (285) across grain: 70 (400)
Elongation, %, Min	ASTM D412 Die C	with grain: 15 across grain: 20	with grain: 15 across grain: 20
Hardness, Shore A	ASTM D2240	85± 8	90± 5
Ozone Resistance	ASTM D518 Method B Ozone Concentration	N/A	50 Hrs @ 38°C (100°F) in 100 ppm
Visual Observation under 7x Magnification			No cracks
Heat Aged 70 Hrs @ 70°C (158°F) • Tensile Strength, Δ%, Max. • Elongation, Δ%, Max. • Hardness, ΔPts. Max.	ASTM D412, Die C ASTM D412, Die C ATM D2240	± 25 ± 25 + 10	± 25 ± 25 + 10

Note: The information presented pertains to the 0.08" Syamar[®] Super Tough masticated rubber product.

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