

## PRODUCT DATA SHEET

Product Description	92 Gypsy	95 Gypsy	98 Gypsy	SiC Gypsy
Ceramic Wear Material	92% Al <sub>2</sub> O <sub>3</sub>	95% Al <sub>2</sub> O <sub>3</sub>	Zirconia Toughened Alumina 80% Al <sub>2</sub> O <sub>3</sub> 20% ZrO <sub>2</sub>	Reaction Bonded Siliconized Silicon Carbide SiSiC
<b>General</b>				
Size Available	Standard* & Custom	Standard* & Custom	Standard* & Custom	Standard* & Custom
Thickness [mm]	Up to 100	Up to 100	Up to 100	Up to 50
Tolerances [mm]	+/-1	+/-1	+/-1	+/-1
Fastening Method	Direct Bond Rubber Backed with Steel Plate Welding, Studding, Countersinking			
Application	Deflectors, Chutes, Bins, Balance Machines, Skirts, Feeders			
Max Working Temp [°C]	1000	1600	1500	1800
Approx. Weight per 1m <sup>2</sup> (63mm thick) [kg]	200	200	200	200
<b>Basic Data</b>				
Density [g/cm <sup>3</sup> ] ASTM C20-87	3.60	3.65	4.40	3.0
Porosity [%] ASTM C20-87	<0.1	<0.1	<0.1	<0.1
Colour	White	White	White / Cream	Dark Grey
Abrasion Resistance [1 – 5]	3	3.5	4	5
Impact Resistance [1 – 5]	2	3.5	4	2
<b>Mechanical Properties</b>				
Flexural (Bending) Strength [MPa] ASTM C674-88	340	408	650	400
Vickers Hardness [kg/mm <sup>2</sup> ] ASTM E384-99	1100	1300	1480	2500
Modulus of Elasticity [GPa] ASTM 674-88	280	300	320	380
Compressive Strength [MPa] ASTM C773-88	1770	1960	2900	2500
Fracture Toughness K <sub>10</sub> [MPa * m <sup>0.5</sup> ] ASTM E1820-13e1	3.5	3	5.8	3.6

\*standard tile size: 150mm long x 100mm wide

\*standard liner size: 300mm long x 300mm wide

# ENGINEERING DOCUMENT



<b>Rubber</b>	Natural
Tensile Strength [psi]	3800
Bond Strength between rubber & ceramic [psi]	3800
Hardness	60 +/- 5 Shore A
Elongation	400%
Resilience	65%