Compound Testing

GRI Data Sheet for Identa-Seal™ Program



	15-01 B-Black	15-02 B-Blue	15-03 GF-Black	15-04 GF-Gold		
PHYSICAL PROPERTIES						
100% modulus, Mpa Tensile @ break, Mpa(psi) Elongation @ break, %	5.8 12.6 (1822 psi) 216	7.6 15.0 (2175 psi) 190	4.2 20.0 (2899 psi) 339	3.0 17.2 (2500 psi) - 365 ———		
Hardness, durometer A	80	74	72	74		
Hardness-Aged 70 hours/250°C						
Duro point change	-1	-1	4	4		
IMMERSION TES	STING					
Tested 1000 hrs/23°C/ Benzen	e					
Duro point change Volume Swell, %	-7 9	-7 9				
Tested 168 hrs/23°C/ Ethylene	Glycol					
Duro point change Volume Swell, %	0 2	0 5	-1 1	2 3		
Tested 336 hrs/150°C/Glycerin						
Duro point change	-1	0	1	-1		
Volume Swell, %	1	1	1	2		
Tested 168 hrs/23°C/ Hexane						
Duro point change	1	-2	0	3		
Volume Swell, %	1	0	1	1		
Tested 1000 hrs/23°C/ Hexane						
Duro point change	-2	-3				
Volume Swell, %	2	2				
Tested 1000 hrs/23°C/ Methan	ol					
Duro point change	-17	-15	-9	-5		
Volume Swell, %	18	18	5	5		
Tested 168 hrs/23°C/ Methylei	ne Chloride					
Duro point change	-12	-10	-9	-4		
Volume Swell, %	17	19	14	15		
Tested 1000 hrs/23°C/ Methyle	ne Chloride					
Duro point change	NR	NR	-13	-13		
Volume Swell, %	NR	NR	15	14		
Tested 1008 hrs/50°C/ 70% Nitric Acid						
Duro point change	NR	NR	-5	-3		
Volume Swell, %	NR	NR	8	10		

DuPont SU2A Requirement				
<u>Viton[®] B</u>	<u>Viton[®] GF</u>			
1400 min	2000 min			
175 min	175 min			
75+/-5	75+/-5			
GRI exceeds the minimum SU2A requirements.				

There are five different elastomers shown here but only two are GRI Identa-Seal™ made with 100% Genuine Viton®.



GRI Identa-Seal™

taking the guesswork out of material identification.

NR= Not Recommended

continued on back...

	15-01 B-Black	15-02 B-Blue	15-03 GF-Black	15-04 GF-Gold			
Tested 1000 hrs/23°C/ Nitric Acid							
Duro point change	NR	NR	-5	-7			
Volume Swell, %	NR	NR	13	11			
Tested 672 hours/80 PSIG Steam							
Duro point change	2	7	3	-1			
Volume Swell, %	-1	-3	1	0			
LOW TEMPERATURE							
Low Temperature Properties							
Tg,°C	-14	-14	-5	-6			
COMPRESSION S							
Compression Set, Method B, Pe		_	_				
70 hrs at 0°F	9	7	7	10			
70 hrs at 23°C	11	6	11	11			
168 hrs at 23°C	14	9	17	15			
336 hrs at 23°C	14	9	16	16			
672 hrs at 23°C	16	8	17	18			
70 hrs at 70°C	10	6	12	13			
168 hrs at 70°C	11	7	13	13			
336 hrs at 70°C	13	7	15	14			
672 hrs at 70°C	13	8	14	16			
70 hrs at 100°C	9	10	12	14			
168 hrs at 100°C	10	11	14	16			
336 hrs at 100°C	11	12	14	16			
672 hrs at 100°C	12	17	15	17			
70 hrs at 150°C	10	15	14	17			
168 hrs at 150°C	15	18	16	20			
336 hrs at 150°C	18	24	17	21			
672 hrs at 150°C	24	30	25	26			
70 hrs at 200°C	18	19	20	21 ——			
336 hrs at 200°C	35	36	39	42			

- A <10% volume swell. Elastomer may exhibit slight swelling and/or loss of physical properties
- **B** 10-30% volume swell. Elastomer affected by chemical exposure (slight visible swelling and/or loss of physical properties).
- **C** 30-50% volume swell. Elastomer affected by chemical exposure (moderate to severe swelling and/or loss of physical properties. Limited functionality possible but must be determined by testing).



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Overall Features and Benefits

- Only 100% Genuine Viton® fluoroelastomers from DuPont® Performance Elastomers used in the manufacture of Identa-Seal™
- Exclusive Identa-Seal[™] Color Code
- Ideal for standardization programs and process safety enhancements
- Eliminates risky and costly material mix-ups
- Independently third party tested and proven

IMPORTANT:

Elastomers such as Viton® are formulated by compounders with the addition of fillers, curing agents, etc., to afford specific engineering properties. Fabricators, such as Gasket Resources, convert the compound by vulcanization into the desired shape. It is important for part specifiers to consult with Gasket Resources, Inc. to determine the appropriate compound for a specific application.



Viton® is a registered trademark of DuPont Performance
Elastomers. DuPont™ is a trademark of DuPont and its affiliates.

DuPont SU2A Requirement

<u>Viton® B</u>	<u>Viton® GF</u>
30 max	45 max

GRI exceeds the minimum SU2A requirements.

NOTE: Testing shows that the Identa-Seal [™] products demonstrate performance comparable to similar black-filled compounds such as FKM/Viton® parts.



Gasket Resources Incorporated has implemented and maintains a Quality Management System which fulfills the requirements of ISO 9001:2000.