DURLON® Identa-Seal™ Viton®

Style	Description
GRI-A Black & UV Fluorescence	Durlon® Identa-Seal™ GRI-A made with Genuine Viton® uses Tracer™ technology. This compound is based on proprietary technology patented by DuPont Performance Elastomers that allows users to quickly verify that their gasket or seal was made using 100% Genuine Viton® as the polymer constituent. In normal lighting Identa-Seal™ GRI-A gaskets and seals look no different from other fluoroelastomer parts. However, under ultraviolet light, this product appears vivid green - your guarantee of authenticity!
GRI-B Blue	Durlon® Identa-Seal™ GRI-B made with Genuine Viton® B has better resistance to attack by chemicals and heat than do compounds of Viton® A and similar dipolymers. GRI-B is recommended for those applications needing better chemical resistance, such as situations requiring sealing against alcohols, aromatic hydrocarbons, chlorinated chemicals, or steam. For these reasons Viton® B is used extensively in the chemical manufacturing and utilities industries and users should consider GRI-B for all chemical sealing applications requiring maximum retention of elastic properties and mechanical strength.
GRI-GF-S Gold	Durlon® Identa-Seal™ GRI-GF-S made with Genuine Viton® GF-S was designed for today's modern lubricants, oxygenated fuels, and bleached chemicals. As new fuels and chemicals are developed, new technology in Viton® polymers has led to the evolution of Viton® GF-S. GRI-GF-S features superior fluid resistance and very low permeation in very aggressive environments. GRI-GF-S products are highly resistant to oxygenated fuels containing MeOH, EtOH, and MTBE; engine lubricants SE-SF and SE-SH grades; aromatic hydrocarbon fluids; steam; chemicals; and concentrated mineral acids.

Durlon® Identa-Seal™ Program

The Challenge

Due to the overwhelming number of black Elastomers and the many types of fluoroelastomer materials, confusion often occurs, leading to the wrong gasket or seal being used in critical services. The confusion can result in catastrophic gasket and seal failures. Colour coding has long been considered ideal but technically out of reach… until now!

The Solution

The Durlon® family of products now introduces a technological breakthrough in material identification… the first colour coded sealing material family manufactured from 100% Genuine Viton® fluoroelastomer. These materials have been extensively tested by third party laboratories and proven to be as chemical and temperature resistant when compared to carbon black filled materials while maintaining excellent physical properties in service.

Identa-Seal™ Features and Benefits

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

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Typical Physical Properties

	GRI-A	GRI-B	GRI-GF-S
Colour	Black	Blue	Gold
Viton® Polymer	A	B-600	GF-S
Durometer	—	75	75
Fluorine, % wt	66	68	70
Tensile Strength, psi (ASTM D412)	2250	2175	2500
100% Modulus, psi (ASTM D412)	1100	1100	460
Ultimate Elongation, % (ASTM D412)	180	190	365
Shore A Hardness, Pts. (ASTM D2240)	76	74	74
Specific Gravity, g/cc (ASTM D297)	1.88	2.24	2.24
Compression Set, % (ASTM D395) 22 hours @ 73°F 22 hours @ 392°F	 — 8.3	 5.6 13.8	 4.7 16.9

Identa-Seal™ Chemical Resistance

	GRI-A	GRI-B	GRI-GF-S
n-Alkyl Alcohols ($C_nH_{2n+1}OH$)			
n = 1 Methanol	NS	NS	A
n = 2 Ethanol	NS	A	A
n > 2 Others	A	A	A
Inorganic Acids			
Nitric Acid, 70%	NS	NS	A
Sulfuric Acid, conc.	NS	A	A
Most Others	A	A	A
Organic Acids			
Acetic Acid, 30%	NS	NS	A
Propionic Acid	NS	NS	A
Fuels			
Hydrocarbon Automotive	A	A	A
Oxygenated Fuels	NS	NS	A

NS = Not Suitable A = Acceptable

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