

**VITON™ GF & VITON™ ETP**

**TECHNICAL INFORMATION**

**CHEMICAL RATINGS**



**NEWMAN™**  
**SANITARY GASKET COMPANY**





Partner of Viton™ a Brand of  
The Chemours Company

### The Chemours Company FC, LLC

#### Viton™ “GF” and Viton™ “ETP”

Viton™ “GF” and Viton™ “ETP” are two new super chemical resistant Viton™ compounds developed to solve critical sealing problems. Viton™ “GF” and Viton™ “ETP” are much more chemical resistant than the old standby Viton™ “A”, which has been the backbone of the Viton™ compound line until now.

The Fluid Chemical Resistance Chart shows the superiority of Viton™ “GF” and Viton™ “ETP”, which will replace Teflon® in most incidents, allowing processing operations the benefit of elastomer gaskets for the first time. Viton™ “ETP” is slightly below Kalrez® in performance allowing additional chemical resistance where it is required further extending the range of elastomer gaskets for very critical sealing applications.

These new Viton™ compounds have an extended life over Viton™ “A” on gaskets and special parts. Viton™ “GF” and Viton™ “ETP” will solve sealing problems in critical processing areas. We have the solution to a single compound material for all sealing areas in your processing facility. Difficult sealing problems are in the past with Viton™ “GF” and Viton™ “ETP”. One compound for gaskets, “O”-Rings and custom parts is yours at last.

As with any material, evaluation of any compound under end-use conditions prior to specification is essential.





Partner of Viton™, a Brand of  
The Chemours Company

## **Viton™ made with Advanced Polymer Architecture (APA) provides FDA Compliance and More.**

Newman Sanitary Gasket Company is a leading manufacturer of sanitary gaskets, o-rings and custom molded parts for the food and pharmaceutical processing industries. You will find Newman Sanitary Gasket company has an unsurpassed tradition of quality, performance, customer service, distribution and development. With a long history of quality manufactured components for the pharmaceutical processing industry Newman is proud to announce the availability of the new DuPont Performance Elastomer Viton™ “GF” and “ETP” to its line of quality elastomers for the manufacturing of sanitary components.

Viton™ “GF” and Viton™ “ETP” are two new super chemical resistant Viton™ compounds developed by DuPont Performance Elastomers to solve critical sealing problems. Viton™ “GF” and Viton™ “ETP” are much more chemical resistant than the old standby Viton™ “A”, which has been the backbone of the Viton™ compound line until now.

**The superiority of Viton™ “GF”, which will replace Teflon® in most instances, allowing processing operations the benefit of elastomer gaskets for the first time. Viton™ “ETP” is slightly below Kalrez® in performance allowing additional chemical resistance where it is required further extending the range of elastomer gaskets for very critical sealing applications.**

These new Viton™ compounds have an extended life over Viton™ “A” on gaskets and special parts. Viton™ “GF” and Viton™ “ETP” will solve sealing problems in critical processing areas. We have the solution to a single compound material for all sealing areas in your processing facility. Difficult sealing problems are in the past with Viton™ “GF” and Viton™ “ETP”. One compound for gaskets, “O”-Rings and custom molded parts is yours at last.

## **Improved Steam and Fluids Resistance Key in Food and Pharmaceutical Applications.**

Bisphenol-cured types of Viton™ or “steam-resistant fluoroelastomers” provide significant improvements in steam resistance, compared to the older, diamine-cured types of fluoroelastomers (FKM). Viton™ A-401C, a bisphenol-cured type of Viton™, quickly became the standard in steam resistant pharmaceutical fluoroelastomer sealing applications when it was shown in 1996 to be compliant with FDA food contact regulation 21 CFR 177.2600, Rubber Goods Intended for Repeated Use. Despite its improved steam resistance, bisphenol-cured Viton™ exhibited inadequate service in some sterilization processes, particularly those that involved the use of highly caustic chemicals.

As an alternative to steam-resistant fluoroelastomers, pharmaceutical and food manufacturers often use EPDM or silicone in cleaning applications that use caustic and steam. EPDM, while it is capable of providing excellent steam resistance, exhibits relatively poor resistance to a wide variety of cleaning fluids. Silicone, on the other hand, may provide good resistance to a wide variety of cleaning fluids but poor steam resistance. The combination of excellent steam resistance and fluids resistance has been demonstrated with the most recent Viton™ speciality polymers.

Based on laboratory results, the latest development in Viton™ fluoroelastomer technology, Advanced Polymer Architecture (APA), provides improved resistance to steam and some cleaning fluids used in food and pharmaceutical processes when compared to diamine- or bisphenol-cured dipolymer fluoroelastomers.

## **Viton™ made with Advanced Polymer Architecture (APA) provides an attractive combination of the following:**

Resistance to a wide variety of food and pharmaceutical related cleaning fluids, including fluids that are highly caustic in nature.

- Resistance to steam.

*As with any material, evaluation of any compound under end-use conditions prior to specification is essential.*

## **Viton™ made with APA Provides a New Level of Performance**

Viton™ made with APA is a proprietary development by The Chemours Company that improves the performance of specialty fluoroelastomers. The following section offers a brief description of Viton™ polymers that provide FDA compliance and their unique capabilities.

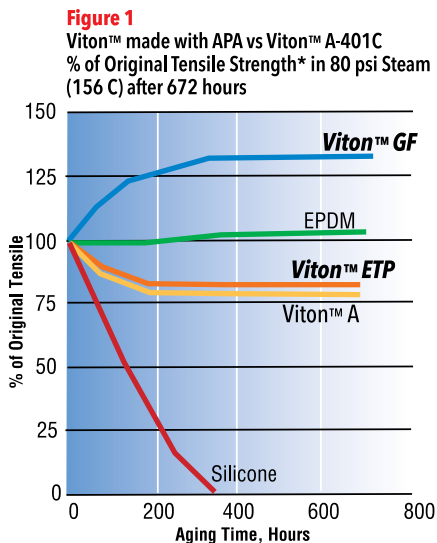
- Viton™ GF-600S is a high-fluorine, peroxide-cure type of Viton™. Compared to bisphenol-cured dipolymer FKM, such as Viton™ A-401C, vulcanizates based on Viton™ GF-600S exhibit excellent steam resistance and superior resistance to a much wider variety of cleaning fluids. Vulcanizates based on Viton™ GF-600S exhibit excellent physical properties, including resistance to compression set.
- Viton™ ETP-600S is a very unique copolymer that exhibits excellent steam resistance and resistance to attack by an exceptionally broad variety of chemicals and fluids, including aliphatic and aromatic hydrocarbons, acids, bases, all types of alcohols and even low molecular weight ketones, esters, and aldehydes.



### Viton™ made with APA Provides Improved Steam Resistance

As mentioned earlier, bisphenol-cured Viton™ has been the standard for applications where steam resistance is critical. As shown in **Figure 1**, APA polymers provide even better resistance to property loss in steam.

As these test results demonstrate, Viton™ polymers based on APA technology, show excellent retention of tensile properties in steam aging, whereas the strength of the vulcanizate made with silicone drops off to essentially zero in less than 400 hours.



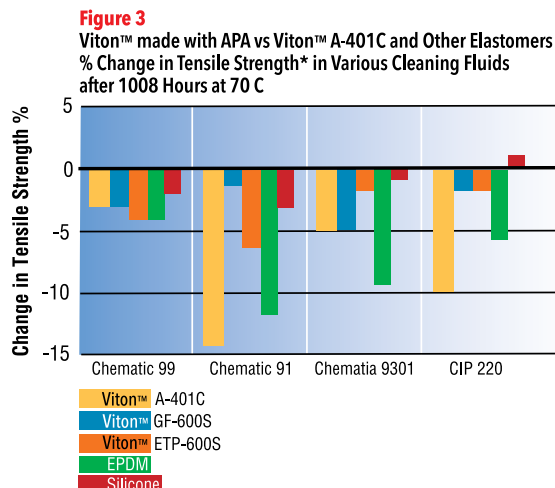
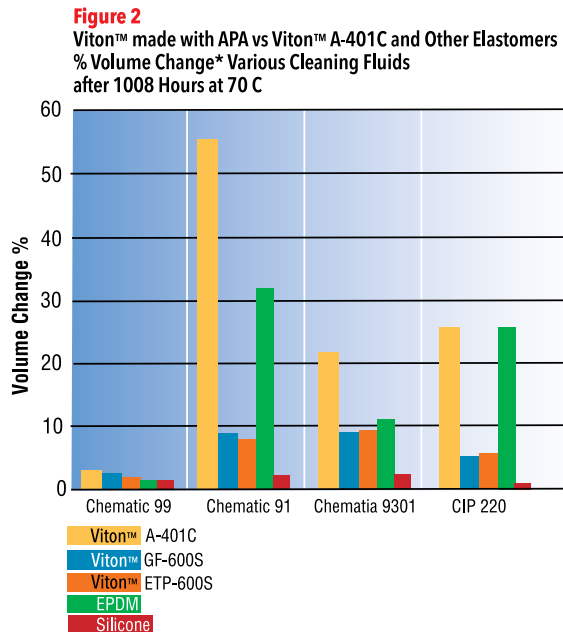
### Viton™ made with APA Demonstrates Excellent Fluids Resistance

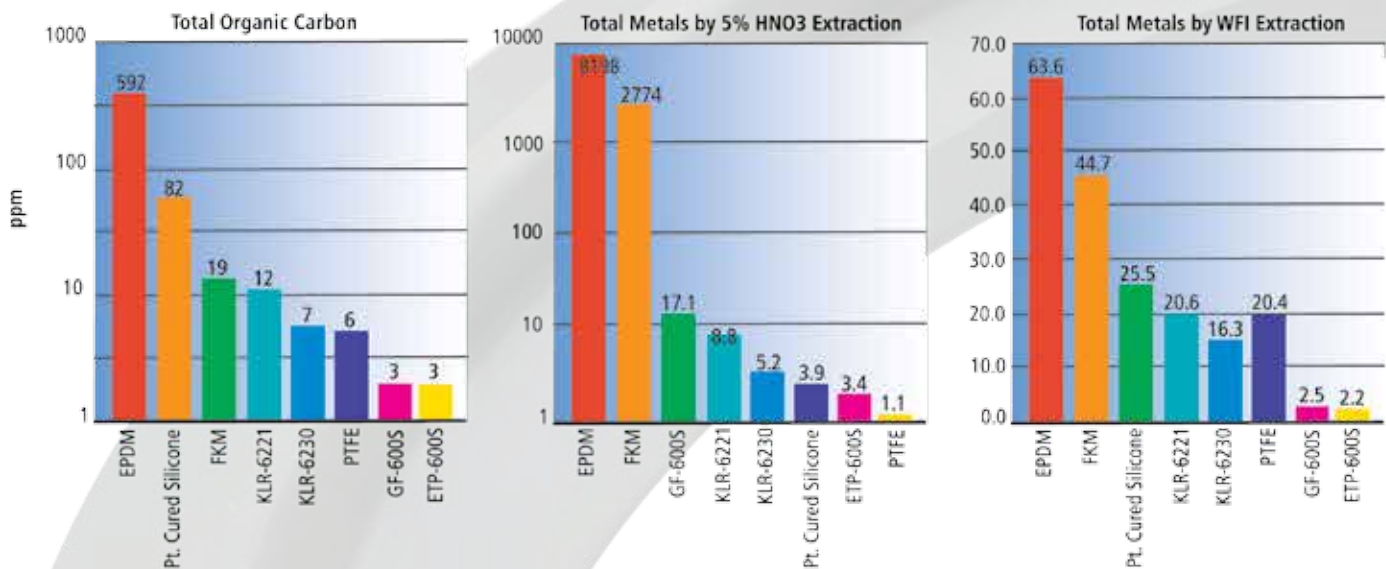
In addition to maintaining its tensile properties in steam, APA polymers also demonstrate improved resistance to volume change in cleaning fluids, such as Chematic® 91, Chematic® 9301, and CIP 220® compared to bisphenol-cured dipolymer FKM, and EPDM (**Figure 2**.)

As indicated in **Figure 2**, vulcanizates based on Viton™ GF-600S and Viton™ ETP-600S exhibit lower volume swell in a wider variety of cleaning fluids than any of the other polymers tested except silicone. The combination of steam resistance and resistance to a wide variety of cleaning solutions make the APA polymers attractive candidates for food and pharmaceutical sealing applications compared to silicone and EPDM.

Volume change in fluids is an indication of the ability of a vulcanizate to maintain sealing performance in a given fluid. If a vulcanizate exhibits excessive swelling, it also tends to exhibit significant losses in hardness and strength which may result in a reduction in the ability of a gasket or O-ring made from the vulcanizate to maintain a seal under pressure.

**Figure 3** shows that, after aging in various commercial cleaning fluids, compounds based on Viton™ GF-600S and Viton™ ETP-600S show virtually no change in tensile strength, whereas EPDM demonstrates a larger loss in tensile strength after the 1008 hour aging prior in Chematic 91 and CIP 220.





### Summary

Sterilization processes used by food and pharmaceutical manufacturers frequently use steam, caustic chemicals or a combination of both. These aggressive conditions are demanding on sealing materials that are often used in these environments, such as EPDM, silicone or fluoroelastomers. EPDM, while it is capable of providing excellent steam resistance, exhibits relatively poor resistance to some commonly used cleaning fluids. Silicone may provide good resistance to a wide variety of cleaning fluids but poor steam resistance. The most recent Viton™ specialty polymers made from APA provide an excellent combination of steam resistance and resistance to cleaning fluids encountered in pharmaceutical and food processes.

Based on laboratory results Viton™ specialty polymers made with APA, especially GF-600S and ETP-600S provide:

- Improved steam and caustic cleaning fluid resistance vs bisphenol or diamine cured FKM.
- Improved steam resistance compared to silicone.
- Improved caustic cleaning fluid resistance vs EPDM

The balance of steam and fluid resistance make APA polymers attractive candidates for sealing in food and pharmaceutical processes in comparison to other alternatives.

Viton™ is a registered trademark of The Chemours Company FC, LLC, used under license by Newman Sanitary Gasket Company  
 Chematic® is a registered trademark of Dober Chemical Corp.  
 CIP 220® is a registered trademark of STERIS Corp.



Partner of Viton™ a Brand of  
The Chemours Company

For further information please contact one of the offices below, or visit our website at [www.Chemours.com/viton](http://www.Chemours.com/viton)

**Global Headquarters - Wilmington, DE USA**

Tel. +1-800-853-5515  
+1-302-792-4000  
+1-302-792-4450

**European Headquarters - Geneva**

Tel. +41-22-717-4000  
Fax. +41-22-717-4001

**South & Central America Headquarters - Brazil**

Tel. +55-11-4166-8978  
Fax. +55-11-4166-8989

**Asia Pacific Headquarters - Singapore**

Tel. +65-6275-9383  
Fax. +65-6275-9395

The information set forth herein is furnished free of charge and is based on technical data that The Chemours Company FC, LLC, believes to be reliable. It is intended for use by persons having technical skill, at their own discretion and risk. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside of our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any material, evaluation of any compound under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on any patents. While the information presented here is accurate at the time of publication, specifications can change. Please check [www.dupont-dow.com](http://www.dupont-dow.com) for the most up-to-date information.

**Caution:** Do not use in medical applications involving permanent implantation in the human body. For other medical applications, discuss with your Chemours Company customer service representative and read Medical Caution Statement H-69237.

Viton™ is a registered trademark of The Chemours Company, FC, LLC  
Chematic® is a registered trademark of Dober Chemical Corp.  
CIP 220® is a registered trademark of STERIS Corp.

Copyright The Chemours Company FC, LLC. All Rights Reserved.

**A = Acceptable**  
**C = Caution - Depends on Condition**  
**NS = Not Suitable**

|  | VITON™ | A  | GF | ETP |
|--|--------|----|----|-----|
| Acetaldehyde                                     | NS     | C  | C  |     |
| Acetamide  | C      | A  | A  |     |
| Acetic Acid, 37%                                 | NS     | C  | A  |     |
| Acetic Acid, Glacial                             | NS     | NS | C  |     |
| Acetic Anhydride                                 | NS     | NS | C  |     |
| Acetone  | NS     | NS | A  |     |
| Acetonitrile                                     | NS     | NS | C  |     |
| Acetophenone                                     | NS     | NS | C  |     |
| Acetyl Chloride                                  | A      | A  | A  |     |
| Acrolein (acrylaldehyde)                         | NS     | NS | C  |     |
| Acrylonitrile                                    | NS     | NS | C  |     |
| Adipic Acid Solution                             | C      | A  | A  |     |
| Alcohol Buttnms                                  | NS     | A  | A  |     |
| Alcohol NOS (Not otherwise specified)            | NS     | A  | A  |     |
| Alcohol Beverage                                 | A      | A  | A  |     |
| Alkyl Benzene                                    | C      | A  | A  |     |
| Alkyl Phenol Ethoxylate                          | NS     | C  | C  |     |
| Alkylamine                                       | NS     | NS | A  |     |
| Alkylbenzene, C10-C16                            | C      | A  | -  |     |
| Allyl Alcohol                                    | NS     | C  | -  |     |
| Alum   | A      | A  | A  |     |
| Allumina Trihydrate Slurry<br>Aluminum Hydroxide | A      | A  | A  |     |
| Aluminum Chloride                                | A      | A  | A  |     |
| Aluminum Chloride Solution                       | C      | A  | A  |     |
| Aluminum Fluoride Solution                       | A      | A  | A  |     |
| Aluminum Sulfate (Alum)                          | A      | A  | A  |     |
| Aluminum Sulfate (Food Grade)                    | A      | A  | A  |     |
| Amines (Mixed)                                   | NS     | NS | A  |     |
| Ammonia Gas, <150 F                              | NS     | NS | C  |     |
| Ammonia, Liquid, Anhydrous                       | NS     | NS | C  |     |
| Ammonia-Aqua<br>(Ammonium Hydroxide)             | NS     | C  | A  |     |
| Ammonium Bisulfide                               | A      | A  | A  |     |
| Ammonium Carbonate Solution                      | A      | A  | A  |     |
| Ammonium Hydroxide                               | NS     | C  | A  |     |
| Ammonium Nitrate                                 | A      | A  | A  |     |
| Ammonium Nitrate Solution                        | A      | A  | A  |     |
| Ammonium Phosphate Solution                      | A      | A  | A  |     |
| Ammonium Sulfamate Solution                      | NS     | NS | C  |     |
| Ammonium Sulfate Solution                        | C      | A  | A  |     |
| Ammonium Sulfide                                 | C      | A  | A  |     |
| Ammonium Sulfide Solution                        | C      | A  | A  |     |
| Ammonium Sulfite Solution                        | A      | A  | A  |     |

|  | VITON™ | A  | GF | ETP |
|--|--------|----|----|-----|
| Ammonium Thiocyanate                               | A      | A  | A  |     |
| Ammonium Thiosulfate                               | A      | A  | A  |     |
| Ammonium Thiosulfate Solution                      | A      | A  | A  |     |
| Amyl Acetate (Banana Oil; Pear Oil)                | NS     | NS | A  |     |
| Amyl Chloride (1-Chloropentane)                    | A      | A  | A  |     |
| Amyl Phenol  | A      | A  | A  |     |
| Aniline (Aminobenzene)                             | C      | A  | A  |     |
| Animal Feed Solution                               | A      | A  | A  |     |
| Animal Oils (Tallow)                               | C      | A  | -  |     |
| Anthraquinone                                      | NS     | C  | A  |     |
| Anitmony Pentachloride<br>(Anitomy Perchloride)    | C      | A  | A  |     |
| Argon  | A      | A  | A  |     |
| Arochlor (Polychlorinated<br>Biphenyl; PCB)        | A      | A  | A  |     |
| Aromatic Concentrate                               | C      | A  | A  |     |
| Arsenic Acid (Orthoarsenic Acid)                   | A      | A  | A  |     |
| Asphalt  | A      | A  | A  |     |
| Aviation Gasoline 100LL                            | C      | A  | A  |     |
| Barium Chlorate Solution                           | A      | A  | A  |     |
| Benzaldehyde (Benzoic Aldehyde)                    | NS     | C  | C  |     |
| Benzene  | C      | A  | A  |     |
| Benezenesulfonic Acid<br>(Phenylsulfonic Acid)     | A      | A  | A  |     |
| Benzoic Acid                                       | A      | A  | A  |     |
| Benzophenone (Cyasorb)                             | A      | A  | A  |     |
| Benzoyl Chloride                                   | C      | A  | A  |     |
| Bnezy Alcohol<br>(Alpha-Hydroxytoluene)            | A      | A  | A  |     |
| Benzyl Chloride<br>(Alpha-Chlorotoluene)           | A      | A  | A  |     |
| Biphenyl (Diphenyl)                                | A      | A  | A  |     |
| Boric Acid Solution                                | A      | A  | A  |     |
| Brake Fluid (Hydraulic Fluid<br>Petroleum-Based)   | C      | C  | A  |     |
| Brine  | C      | A  | A  |     |
| Bromine  | C      | A  | A  |     |
| Bromochloromethane<br>(Halon 1011)                 | NS     | C  | C  |     |
| Bromochloropropane<br>(Trimethylene Chlorobromide) | NS     | C  | C  |     |
| Bunker C Oil                                       | A      | A  | A  |     |
| Butadiene (1,3 Butadiene)                          | NS     | A  | A  |     |
| Butane   | A      | A  | A  |     |
| Butanediol   | A      | A  | A  |     |
| Butanol  | A      | A  | A  |     |

|   | VITON™ | A  | GF | ETP |
|---|--------|----|----|-----|
| Butene (Butylene)                                     | A      | A  | A  |     |
| Butyl Acetate (n-; sec-, tert-Butyl<br>Acetate)       | NS     | NS | C  |     |
| Butyl Acrylate (n-Butyl Acrylate)                     | NS     | NS | C  |     |
| Butyle Alcohol (1-Butanol)                            | A      | A  | A  |     |
| Butyl Amine   | NS     | NS | C  |     |
| Butyl Benzyl Phthalate (BBP)                          | NS     | A  | A  |     |
| Butyl Carbitol (Diethylene<br>Glycol Monobutyl Ether) | C      | A  | A  |     |
| Butyl Cellosolve (Ethylene<br>Glycol Monobutyl Ether) | NS     | C  | A  |     |
| Butyl Chloride (Chlorobutane)                         | A      | A  | A  |     |
| Butyl Ether (n-Dibutyl Ether)                         | NS     | NS | C  |     |
| Butyl Mercaptan (Butanethiol)                         | NS     | C  | C  |     |
| Butyl Methacrylate                                    | NS     | NS | A  |     |
| Butyl Oleate  | A      | A  | A  |     |
| Butyl Phenol (o-sec-Butylphenol)                      | A      | A  | A  |     |
| Carbon Black Oil                                      | A      | A  | A  |     |
| Carbon Black  | A      | A  | A  |     |
| Carbon Dioxide  | A      | A  | A  |     |
| Carbon Disulfide (Carbon Bisulfide)                   | C      | A  | A  |     |
| Carbon Tetrachloride<br>(Tetrachloromethane)          | A      | A  | A  |     |
| Carbowax Polyethylene Glycol 400                      | A      | A  | A  |     |
| Carboxybenzene (Benzoic<br>Acid Solution)             | A      | A  | A  |     |
| Castor Oil  | A      | A  | A  |     |
| Caustic Soda  | NS     | C  | C  |     |
| 50% Caustic   | NS     | C  | C  |     |
| Cayenne Pepper Mash                                   | A      | A  | A  |     |
| Cellosolve Acetate                                    | NS     | NS | C  |     |
| Cetyl Alcohol (1-Hexadecanol)                         | A      | A  | A  |     |
| CIP 150 (20% @70° C)                                  | A      | A  | A  |     |
| CIP 220 (20% @70° C)                                  | NS     | A  | A  |     |
| Chematic 91 (20% @70° C)                              | NS     | A  | A  |     |
| Chematic 99 (20% @70° C)                              | A      | A  | A  |     |
| Chematic 9301 (20% @70° C)                            | C      | A  | A  |     |
| Chloral (Trichloroacetaldehyde)                       | NS     | NS | C  |     |
| Chlordane   | A      | A  | A  |     |
| Chlorinated Paraffin                                  | A      | A  | A  |     |
| Chlorinated Phosphate Ester                           | -      | -  | -  |     |
| Chlorine  | A      | A  | A  |     |
| Chloroacetic Acid                                     | NS     | NS | A  |     |
| Chlorobenzaldehyde                                    | NS     | NS | C  |     |

**A = Acceptable**  
**C = Caution - Depends on Condition**  
**NS = Not Suitable**

|  | VITON™ | A  | GF | ETP |
|--|--------|----|----|-----|
| Chlorobenzene (Monochlorobenzene)                  | C      | A  | A  |     |
| Chlorodifluoroethane                               | NS     | NS | A  |     |
| Chlorodifluoromethane                              | NS     | NS | C  |     |
| Chloroform (Trichloromethane)                      | C      | A  | A  |     |
| Chloronaphthalene                                  | A      | A  | A  |     |
| Chloropicrin (Trichloronitromethane)               | A      | A  | A  |     |
| Chlorosulfonic Acid (Sulfuric Chlorohydrin)        | NS     | NS | A  |     |
| Chlorotoluene                                      | A      | A  | A  |     |
| Chocolate  | A      | A  | A  |     |
| Chrome Plating Solutions                           | A      | A  | A  |     |
| Chromic Acid                                       | A      | A  | A  |     |
| Citric Acid  | A      | A  | A  |     |
| Clay Slurry  | C      | A  | A  |     |
| Coal Tar   | A      | A  | A  |     |
| Coal Tar Light Oil, Ashland                        | A      | A  | A  |     |
| Coal Tar Oil                                       | C      | A  | A  |     |
| Coal Tar Pitch                                     | C      | A  | A  |     |
| Coconut Fatty Alcohol                              | A      | A  | A  |     |
| Coconut Oil  | A      | A  | A  |     |
| Cod Liver Oil                                      | A      | A  | A  |     |
| Copper (II) Sulphate Solution                      | C      | A  | A  |     |
| Copper Chloride Solution                           | C      | A  | A  |     |
| Corn Gluten Meal                                   | A      | A  | A  |     |
| Corn Oil   | A      | A  | A  |     |
| Corn Syrup   | A      | A  | A  |     |
| Cotton Seed Oil                                    | A      | A  | A  |     |
| Creosote   | A      | A  | A  |     |
| Meta-Cresol  | A      | A  | A  |     |
| Para-Cresol  | A      | A  | A  |     |
| Cresol (Cresylic Acid)                             | A      | A  | A  |     |
| Meta-Cresylic Acid                                 | A      | A  | A  |     |
| Cresylic Acid                                      | A      | A  | A  |     |
| Crotonaldehyde (2-Butenal)                         | NS     | C  | A  |     |
| Crude Oil  | A      | A  | A  |     |
| Crude Vegetable Oil (See Vegetable Oil)            | A      | A  | A  |     |
| Cumene (Isopropylbenzene)                          | A      | A  | A  |     |
| Cyclohexane (Hexamethylene)                        | A      | A  | A  |     |
| Cyclohexanol (Hexahydrophenol)                     | A      | A  | A  |     |
| Cyclohexanone (Pimelic Ketone; keto-hexamethylene) | NS     | NS | A  |     |
| Cyclohexene (1,2,3,4-tetrahydrobenzene)            | NS     | C  | C  |     |

|   | VITON™ | A  | GF | ETP |
|---|--------|----|----|-----|
| Cyclohexylamine (Hexahydroaniline)              | NS     | NS | C  |     |
| Cyclopentadiene                                 | NS     | C  | C  |     |
| Cyclopentane (Pentamethylene)                   | A      | A  | A  |     |
| Decanol (Decyl Alcohol)                         | C      | A  | A  |     |
| Detergents                                      | A      | A  | C  |     |
| Dextrose  | A      | A  | A  |     |
| Diacetone Alcohol                               | NS     | C  | C  |     |
| Diamylamine (Di-n-Pentylamine)                  | NS     | NS | C  |     |
| Diazinon  | C      | A  | A  |     |
| Dibenzyl Sebacate                               | C      | A  | A  |     |
| Dibutyl Phthalate                               | NS     | A  | A  |     |
| Dibutyl Sebacate                                | NS     | A  | A  |     |
| Dibutylamine                                    | NS     | NS | A  |     |
| Dicapryl Phthalate (DCP)                        | NS     | A  | A  |     |
| Dichloroaniline                                 | NS     | C  | A  |     |
| Ortho-Dichlorobenzene                           | A      | A  | A  |     |
| Para-Dichlorobenzene                            | A      | A  | A  |     |
| Dichlorobenzene (Para-or-Ortho Dichlorobenzene) | A      | A  | A  |     |
| Dichlorobenzene Mix                             | A      | A  | A  |     |
| Dichlorobutane (Tetramethylene Dichloride; DCB) | A      | A  | A  |     |
| Dichlorodifluoromethane (R-12)                  | C      | C  | -  |     |
| Dichloroacetylene                               | C      | A  | A  |     |
| Dichloromonofluoromethane (R-21)                | NS     | NS | NS |     |
| Dichlorophenol                                  | C      | A  | A  |     |
| Dichloropropane                                 | A      | A  | A  |     |
| Dichlorotetrafluoroethane (R-114)               | C      | C  | A  |     |
| Dicyclohexylamine                               | NS     | C  | A  |     |
| Diesel Fuel (Fuel Oil #2)                       | A      | A  | A  |     |
| Diethanolamine                                  | NS     | C  | C  |     |
| Diethyl Carbonate                               | A      | A  | A  |     |
| Diethyl Phthalate (DEP)                         | C      | A  | A  |     |
| Diethylamine                                    | NS     | NS | C  |     |
| Diethylbenzene                                  | C      | A  | A  |     |
| Diethylene Glycol                               | A      | A  | A  |     |
| Diethylene Glycol Diethyl Ether                 | NS     | C  | C  |     |
| Diethylene Glycol Monoethyl Ethel               | NS     | C  | C  |     |
| Diethylene Glycol Monoethyl Ether Acetate       | NS     | NS | C  |     |
| Diethylene Glycol Monomethyl Ether              | NS     | C  | C  |     |

|                                       | VITON™ | A  | GF | ETP |
|---------------------------------------|--------|----|----|-----|
| Diethylene Glycol Monopropyl Ether    | NS     | C  | C  |     |
| Diethylenetriamine                    | NS     | NS | C  |     |
| Diethylketone (Metacetone, Propione)  | NS     | C  | C  |     |
| Difluoroethane (Ethylidene Fluoride)  | NS     | NS | C  |     |
| Diisobutyl Ketone                     | NS     | NS | C  |     |
| Diisobutyl Phthalate                  | C      | A  | A  |     |
| Diisobutylene                         | A      | A  | A  |     |
| Diisodecyl Adipate                    | C      | A  | A  |     |
| Diisodecyl Phthalate                  | C      | A  | A  |     |
| Diisooctyl Azelate (DIOZ)             | C      | A  | A  |     |
| Diisooctyl Phthalate                  | C      | A  | A  |     |
| Diisopropanolamine                    | -      | -  | -  |     |
| Diisopropyl Ether                     | A      | A  | A  |     |
| Diisopropylamine                      | -      | -  | -  |     |
| n,n-Dimethyl Acetamide (DMAC)         | NS     | NS | C  |     |
| n,n-Dimethyl Aniline                  | NS     | NS | C  |     |
| Dimethyl Ether (Methyl Ether)         | NS     | NS | C  |     |
| Dimethyl Formamide                    | NS     | NS | A  |     |
| Dimryhyl Phthalate                    | C      | A  | A  |     |
| Dimethyl Sebacate                     | C      | A  | A  |     |
| Dimethyl Sulfate (Methyl Sulfate)     | NS     | C  | C  |     |
| Dimethyl Sulfoxide (DMSO)             | NS     | C  | C  |     |
| Dimethyl Terephthalate                | C      | A  | A  |     |
| Dimethylamine, Anhydrous (DMA)        | NS     | NS | A  |     |
| Dimethylamine, Aqueous (DMA Solution) | NS     | NS | A  |     |
| Dinitrotoluene (2,4-;3,4-;3,5-D)      | NS     | C  | C  |     |
| Diocyl Adipate (Di[2-Ethylehexy])     | C      | A  | A  |     |
| Diocyl Azelate (Di[2-Ethylehexy])     | C      | A  | A  |     |
| Diocyl Sebacate                       | A      | A  | A  |     |
| Dioxane (Diethylene Ether)            | NS     | NS | A  |     |
| Diphenyl Ether                        | A      | A  | A  |     |
| Diphenyl Oxide                        | A      | A  | A  |     |
| Diphenylamine (n-Phenylaniline)       | NS     | C  | A  |     |
| Divinylbenzene (Vinylstyrene)         | C      | A  | A  |     |
| Dodecanol (Lauryl Alcohol)            | C      | A  | A  |     |
| Dodecylbenzene                        | A      | A  | A  |     |
| Dodecylphenol                         | C      | A  | A  |     |
| Dowtherm-A                            | A      | A  | A  |     |
| Dowtherm-E                            | A      | A  | A  |     |
| Drilling Mud                          | C      | C  | C  |     |



**A = Acceptable**  
**C = Caution - Depends on Condition**  
**NS = Not Suitable**

|   | VITON™ | A  | GF | ETP |
|---|--------|----|----|-----|
| Emulsifiers                                   | C      | C  | C  |     |
| Epichlorohydrin (Chloropropylene)             | NS     | C  | C  |     |
| Ethane  | A      | A  | A  |     |
| Ethanol                                       | C      | A  | A  |     |
| Ethanolamine (Monoethanolamine)               | NS     | NS | C  |     |
| Ethyl Acetate                                 | NS     | NS | C  |     |
| Ethyl Acetoacetate                            | NS     | NS | C  |     |
| Ethyl Acrylate                                | NS     | NS | C  |     |
| Ethyl Alcohol (Ethanol, Grain Alcohol)        | C      | A  | A  |     |
| Ethyl Amyl Ketone (EAK, 5-Methyl-3-Heptanone) | NS     | C  | C  |     |
| Ethyl Bromide (Bromoethane)                   | A      | A  | A  |     |
| Ethyl Butanol (2-Ethylbutyl Alcohol)          | C      | A  | A  |     |
| Ethyl Butyl Ketone (3-Heptanone)              | NS     | C  | C  |     |
| Ethyl Chloride                                | A      | A  | A  |     |
| Ethyl Ether                                   | NS     | NS | C  |     |
| Ethyl Formate                                 | A      | A  | A  |     |
| Ethyl Hexanol                                 | A      | A  | A  |     |
| Ethyl Isopropyl Ketone                        | NS     | C  | C  |     |
| Ethyl Mercaptan (Ethanethiol)                 | C      | A  | A  |     |
| Ethyl Methyl Ether                            | NS     | C  | C  |     |
| Ethyl Oxalate                                 | A      | A  | A  |     |
| Ethyl Silicate (Tetraethyl Orthosilicate)     | A      | A  | A  |     |
| Ethylamine, Anhydrous (Monoethylamine)        | NS     | NS | C  |     |
| Ethylamine, Aqueous (Aqueous Monoethylamine)  | NS     | NS | C  |     |
| Ethylbenzene (Phenylethane)                   | A      | A  | A  |     |
| Ethylene                                      | C      | A  | A  |     |
| Ethylene Chlorohydrin (2-Chloroethyl Alcohol) | A      | A  | A  |     |
| Ethylene Dibromide (EDB, 1,2-Dibromoethane)   | C      | A  | A  |     |
| Ethylene Dichloride (1,2-Ethylene Dichloride) | A      | A  | A  |     |
| Ethylene Glycol (1,2-Ethandiol)               | A      | A  | A  |     |
| Ethylene Glycol Monobutyl Ether               | NS     | NS | C  |     |
| Ethylene Oxide (Oxirane)                      | NS     | NS | NS |     |
| Ethylene Vinyl Acetate Copolymer              | -      | -  | -  |     |
| Ethylenediamine (1,2-Diaminoethane)           | NS     | NS | NS |     |
| 2-Ethylhexanol                                | A      | A  | A  |     |

|                                   | VITON™ | A  | GF | ETP |
|-----------------------------------|--------|----|----|-----|
| Fatty Acid                        | A      | A  | A  |     |
| Fatty Acid Esters of Coconut Oil  | A      | A  | A  |     |
| Fatty Alcohol                     | A      | A  | A  |     |
| Fatty Alcohol, C10-12             | A      | A  | A  |     |
| Fatty Alcohol, C12-14             | A      | A  | A  |     |
| Fatty Alcohol, C14-C18            | A      | A  | A  |     |
| Fatty Amine                       | NS     | C  | C  |     |
| Ferric Chloride                   | A      | A  | A  |     |
| Ferric Chloride Solution          | A      | A  | A  |     |
| Ferrous Chloride Solution         | A      | A  | A  |     |
| Ferrous Sulfate Solution          | A      | A  | A  |     |
| Fertilizer Ammoniation Solution   | C      | C  | C  |     |
| Fish Oil                          | A      | A  | A  |     |
| Fish Soluble                      | A      | A  | A  |     |
| Formaldehyde                      | NS     | NS | C  |     |
| Formaldehyde Solution             | NS     | NS | C  |     |
| Formic Acid                       | NS     | NS | C  |     |
| Freon                             | C      | C  | C  |     |
| Freon 11 (Trichlorofluoromethan)  | C      | C  | C  |     |
| Freon 114 (Dichlorotetrafluoroet) | C      | C  | C  |     |
| Freon 12 (Dichlorodifluorometha)  | C      | C  | -  |     |
| Freon 141-B (Dichlorofluoroetha)  | C      | C  | -  |     |
| Freon 22 (Chlorodifluoromethan)   | C      | C  | -  |     |
| Fuel Oil                          | A      | A  | A  |     |
| Fuel Oil (No.3,4,5,6,& heavy)     | C      | C  | C  |     |
| Fumaric Acid Solution             | A      | A  | A  |     |
| Furfural                          | NS     | NS | C  |     |
| Furfuryl Alcohol                  | C      | A  | A  |     |
| Gasoline                          | C      | A  | A  |     |
| Gasoline Fuel Additives           | C      | A  | A  |     |
| Gluconic Acid Solution            | C      | C  | A  |     |
| Glucose                           | A      | A  | A  |     |
| Glue                              | A      | A  | A  |     |
| Glycerin                          | A      | A  | A  |     |
| Glycol                            | A      | A  | A  |     |
| Glycol Ethers                     | NS     | C  | C  |     |
| Helium                            | A      | A  | A  |     |
| Heptane                           | A      | A  | A  |     |
| Heptanoic Acid                    | A      | A  | A  |     |
| 3-Heptanol                        | A      | A  | A  |     |
| Hexanol                           | A      | A  | A  |     |
| Hexene (n-Hexene)                 | A      | A  | A  |     |

|  | VITON™ | A  | GF | ETP |
|--|--------|----|----|-----|
| Hexyl Alcohol                                    | A      | A  | A  |     |
| Hexylene Glycol                                  | A      | A  | A  |     |
| Hydrazine  | NS     | NS | C  |     |
| Hydrazine (Aqueous Solution)                     | NS     | NS | C  |     |
| Hydrobromic Acid                                 | A      | A  | A  |     |
| Hydrocyanic Acid (Hydrogen Cyanide)              | A      | A  | A  |     |
| Hydrofluoric Acid, Aqueous                       | NS     | NS | C  |     |
| Hydrofluoric Acid, Anhydrous                     | NS     | NS | C  |     |
| Hydrofluoric Acid, Anhydrous (Hydrogen Fluoride) | NS     | NS | C  |     |
| Hydrofluosilicic Acid Solution                   | A      | A  | A  |     |
| Hydrofluosilicic Acid                            | A      | A  | A  |     |
| Hydrogen   | A      | A  | A  |     |
| Hydrogen Peroxide Solution                       | A      | A  | A  |     |
| Hydrogen Chloride                                | C      | A  | A  |     |
| Hydrogen Chloride (HCl-Anhydrous)                | C      | A  | A  |     |
| Hydrogen Fluoride Anhydrous                      | NS     | NS | C  |     |
| Hydrogen Peroxide                                | A      | A  | A  |     |
| Hydrogen Sulfide                                 | NS     | C  | C  |     |
| Ink  | A      | A  | A  |     |
| Isoamyl Acetate                                  | NS     | NS | C  |     |
| Isoamyl Alcohol                                  | A      | A  | A  |     |
| Isobutane (Butane)                               | C      | C  | C  |     |
| Isobutanol                                       | A      | A  | A  |     |
| Isobutene (Isobutylene)                          | A      | A  | A  |     |
| Isobutyl Acetate                                 | NS     | NS | C  |     |
| Isobutyl Acrylate                                | NS     | NS | C  |     |
| Isobutyl Alcohol                                 | A      | A  | A  |     |
| Isobutylamine                                    | NS     | C  | C  |     |
| Isobutyl Isobutyrate                             | C      | C  | C  |     |
| Isobutylene (Isobutene, 2-Methylpropene)         | A      | A  | A  |     |
| Isobutyraldehyde                                 | NS     | C  | C  |     |
| Isobutyric Acid                                  | NS     | C  | C  |     |
| Isodecanol                                       | C      | A  | A  |     |
| Isodecanol Mixed Isomers                         | C      | A  | A  |     |
| Isopentane                                       | A      | A  | A  |     |
| Isophorone                                       | NS     | NS | C  |     |
| Isopropanol                                      | A      | A  | A  |     |
| Isopropanolamine                                 | NS     | NS | C  |     |
| Isopropyl Acetate                                | NS     | NS | C  |     |
| Isopropyl Amine (Isopropanol Amine)              | NS     | NS | C  |     |

# Chemical Ratings

**A = Acceptable**  
**C = Caution - Depends on Condition**  
**NS = Not Suitable**

|  | VITON™ | A  | GF | ETP |
|--|--------|----|----|-----|
| Isopropyl Cellosolve                                 | NS     | C  | C  |     |
| Isopropyl Ether                                      | NS     | C  | C  |     |
| Jet Fuel   | A      | A  | A  |     |
| Lacquers, Nitrocellulose                             | NS     | NS | A  |     |
| Lactic Acid  | A      | A  | A  |     |
| Latex  | C      | A  | A  |     |
| Lauric Acid  | A      | A  | A  |     |
| Light Fuel Oil                                       | C      | A  | A  |     |
| Limestone Slurry                                     | A      | A  | A  |     |
| Linseed Oil  | A      | A  | A  |     |
| Liquefied Petroleum Gas (LPG)                        | C      | A  | A  |     |
| Lube Oil   | A      | A  | A  |     |
| Magnesium Chloride                                   | A      | A  | A  |     |
| Magnesium Hydroxide (Milk of Mangesia)               | A      | A  | A  |     |
| Maleic Acid  | A      | A  | A  |     |
| Maleic Anhydride                                     | NS     | C  | C  |     |
| Manganese Sulfate Solution                           | A      | A  | A  |     |
| Mesityl Oxide  | NS     | NS | C  |     |
| Methane  | A      | A  | A  |     |
| Methanol   | NS     | A  | A  |     |
| Methyl Acetate                                       | NS     | NS | C  |     |
| Methyl Aceto Acetate                                 | NS     | NS | C  |     |
| Methyl Acetone                                       | NS     | NS | C  |     |
| Methyl Acrylate                                      | NS     | NS | C  |     |
| Methyl Alcohol (Methanol)                            | NS     | A  | A  |     |
| Methyl Amyl Acetate                                  | NS     | NS | C  |     |
| Methyl Amyl Alcohol (Methyl Isobutyl Carbinol)       | NS     | C  | A  |     |
| Methyl Amyl Ketone                                   | NS     | C  | C  |     |
| Methyl Bromide (Bromomethane)                        | A      | A  | A  |     |
| Methyl Butyl Ketone                                  | NS     | NS | C  |     |
| Methyl Cellosolve (Ethylene Glycol Monomethyl Ether) | NS     | NS | A  |     |
| Methyl Chloride (Chloromethane)                      | C      | A  | A  |     |
| Methyl Chloroformate                                 | C      | A  | A  |     |
| Methyl Ethyl Ketone                                  | NS     | NS | C  |     |
| Methyl Isoamyl Ketone                                | NS     | NS | C  |     |
| Methyl Isobutyl ketone (MIBK)                        | NS     | NS | C  |     |
| Methyl Isocyanate                                    | NS     | C  | C  |     |
| Methyl Isopropenyl Ketone                            | NS     | C  | C  |     |
| Methyl Mercaptan (Methanethiol)                      | C      | A  | A  |     |
| Methyl Methacrylate                                  | NS     | NS | C  |     |
| Methyl Methacrylate Monomer                          | NS     | NS | C  |     |

|  | VITON™ | A  | GF | ETP |
|--|--------|----|----|-----|
| Methyl Naphthyl Ketone                   | NS     | C  | C  |     |
| Methyl Oleate                            | A      | A  | A  |     |
| Methyl Parathion Insecticide             | C      | C  | C  |     |
| Methyl Tert. Butyl Ether (MTBE)          | NS     | NS | C  |     |
| Methylamine, Anhydrous (Monomethylamine) | NS     | NS | C  |     |
| Methylamine, Aqueous                     | NS     | NS | C  |     |
| Methylaniline                            | C      | A  | A  |     |
| Methylene Bromide                        | C      | A  | A  |     |
| Methylene Chloride                       | C      | A  | A  |     |
| Mineral Oil                              | A      | A  | A  |     |
| Mineral Spirit                           | C      | A  | A  |     |
| Mixed C4 Hydrocarbons                    | C      | A  | A  |     |
| Molasses                                 | A      | A  | A  |     |
| Molten Sulfur                            | C      | A  | A  |     |
| Monochlorodifluoroethane                 | NS     | NS | NS |     |
| Monochlorodifluoromethane (R-22)         | NS     | NS | NS |     |
| Monochlorotrifluoroethane                | C      | C  | C  |     |
| Monoethanolamine                         | NS     | NS | C  |     |
| Monomethyl Ether (Methyl Carbitol)       | NS     | NS | C  |     |
| Monomethylamine                          | NS     | NS | C  |     |
| Myristic Acid                            | A      | A  | A  |     |
| N-Methyltaurine                          | -      | -  | -  |     |
| Naphtha                                  | A      | A  | A  |     |
| Naphtha, Coal-Tar                        | C      | A  | A  |     |
| Naphtha, Petroleum                       | C      | A  | A  |     |
| Naphthalene                              | A      | A  | A  |     |
| Naphthenic Acid                          | A      | A  | A  |     |
| Natural Gas Liquids                      | A      | A  | A  |     |
| Neatsfoot Oil                            | A      | A  | A  |     |
| Neodecanoic Acid                         | C      | A  | A  |     |
| Neohexane                                | A      | A  | A  |     |
| Nitric Acid                              | C      | C  | C  |     |
| Nitrobenzene                             | C      | A  | A  |     |
| Nitroethane                              | NS     | NS | C  |     |
| Nitrogen                                 | A      | A  | A  |     |
| Nitrogen Fertilizer Solution (<40 psia)  | C      | C  | C  |     |
| Nitrogen Dioxide                         | NS     | NS | C  |     |
| Nitrogen Fertilizer Solution             | C      | C  | C  |     |
| Nitrogen Soluton, 19%                    | C      | C  | C  |     |
| 2-Nitropropane                           | NS     | NS | C  |     |
| Ortho-Nitrotoluene                       | NS     | C  | C  |     |

|                                | VITON™ | A  | GF | ETP |
|--------------------------------|--------|----|----|-----|
| Nonene                         | C      | A  | A  |     |
| Para-Nonyl Phenol              | C      | C  | C  |     |
| Nonylene                       | C      | C  | C  |     |
| Nonylphenol                    | C      | C  | C  |     |
| Octadecene                     | C      | A  | A  |     |
| Octadecyltrichlorosilane       | -      | -  | -  |     |
| Octane                         | A      | A  | A  |     |
| Octanoic Acid                  | C      | A  | A  |     |
| Octyl Alcohol                  | A      | A  | A  |     |
| Tert-Octylamine                | NS     | C  | C  |     |
| Octyl Alcohol                  | A      | A  | A  |     |
| Olefins                        | A      | A  | A  |     |
| Oleic Acid                     | C      | A  | A  |     |
| Oleum                          | C      | A  | A  |     |
| Orange Juice                   | A      | A  | A  |     |
| Oxygen                         | A      | A  | A  |     |
| Palmitic Acid                  | A      | A  | A  |     |
| Paraffin Oil                   | C      | A  | A  |     |
| Paraffin Wax                   | A      | A  | A  |     |
| Paraldehyde                    | NS     | NS | C  |     |
| Pelargonic Acid                | C      | A  | A  |     |
| Pentachloroethane              | C      | A  | A  |     |
| Pentachlorophenol (solution)   | C      | A  | A  |     |
| Pentane                        | C      | C  | C  |     |
| Pentene                        | C      | A  | A  |     |
| Perchloroethylene              | A      | A  | A  |     |
| Perchlorothane                 | C      | A  | A  |     |
| Petrolatum                     | A      | A  | A  |     |
| Petroleum Oils                 | C      | C  | C  |     |
| Petroleum Gas Oil              | C      | C  | C  |     |
| Petroleum Oil Additive         | C      | C  | C  |     |
| Phenol                         | A      | A  | A  |     |
| Phenosulfonic Acid             | A      | A  | A  |     |
| Phenyl Methyl Ketone           | NS     | NS | C  |     |
| Phenylacetaldehyde             | NS     | NS | C  |     |
| Phenylethyl Alcohol            | C      | C  | C  |     |
| Phosgene (carbonyl chloride)   | NS     | NS | NS |     |
| Phosphatic Fertilizer Solution | C      | C  | C  |     |
| Phosphoric Acid                | A      | A  | A  |     |
| Phosphorus Chlorides           | A      | A  | A  |     |
| Phosphorus Pentachloride       | C      | C  | C  |     |
| Phosphorus Trichloride         | A      | A  | A  |     |
| Phthalate Esters, Mixed        | C      | C  | C  |     |
| Phthalic Anhydride             | NS     | C  | C  |     |

**A = Acceptable**  
**C = Caution - Depends on Condition**  
**NS = Not Suitable**

|  | VITON™ | A  | GF | ETP |
|--|--------|----|----|-----|
| Pine Oil   | A      | A  | A  |     |
| Pinene   | A      | A  | A  |     |
| Pitch  | C      | A  | A  |     |
| Pivalic Acid (Neopentanoic Acid, Trimethylacetic Acid) | NS     | C  | C  |     |
| Polyester Resin  | A      | A  | A  |     |
| Polyethylene Glycol                                    | A      | A  | A  |     |
| Polyglycol   | C      | A  | A  |     |
| Polisibutylene Amine                                   | NS     | C  | C  |     |
| Polyols  | C      | C  | C  |     |
| Polyoxyethylene Amine                                  | NS     | C  | C  |     |
| Polypropylene, Amorphous                               | A      | A  | A  |     |
| Polypropylene  | C      | A  | A  |     |
| Polystyrene  | C      | A  | A  |     |
| Polyvinyl Acetate Solution                             | NS     | NS | C  |     |
| Polyvinyl Methyl Ether                                 | NS     | C  | C  |     |
| Potash   | A      | A  | A  |     |
| Potash Alum Solution                                   | C      | A  | A  |     |
| Potassium Carbonate Solution                           | A      | A  | A  |     |
| Potassium Cyanide Solution                             | A      | A  | A  |     |
| Potassium Ferrocyanide Solution                        | C      | A  | A  |     |
| Potassium Fluoride Solution                            | A      | A  | A  |     |
| Potassium Hydroxide                                    | NS     | NS | A  |     |
| Potassium Silicate Solution                            | A      | A  | A  |     |
| Propane  | A      | A  | A  |     |
| Propane Butane Mix                                     | A      | A  | A  |     |
| Propanoic Acid (Propionic Acid)                        | NS     | C  | A  |     |
| Propionaldehyde  | NS     | NS | C  |     |
| Propionic Acid   | NS     | C  | A  |     |
| Propyl Acetate   | NS     | NS | C  |     |
| Propyl Alcohol   | A      | A  | A  |     |
| Propyl Mercaptan                                       | -      | -  | -  |     |
| Propylamine  | NS     | NS | C  |     |
| Propylene  | A      | A  | A  |     |
| Propylene (Propene)                                    | A      | A  | A  |     |
| Propylene Dichloride                                   | C      | A  | A  |     |
| 1,2-Propylene Glycol                                   | A      | A  | A  |     |
| Propylene Glycol Monomethylether                       | -      | C  | C  |     |
| Propylene Glycol Monomethylether Ether                 | -      | C  | C  |     |
| Propylene Oxide  | NS     | NS | NS |     |
| Propyltrichlorosilane                                  | -      | -  | -  |     |
| Pyridine   | NS     | NS | C  |     |
| Quinoline  | A      | A  | A  |     |

|                                 | VITON™ | A | GF | ETP |
|---------------------------------|--------|---|----|-----|
| Rapeseed Oil                    | A      | A | A  |     |
| Refrigerant Gases               | C      | C | C  |     |
| Resins                          | C      | C | C  |     |
| Rosin                           | A      | A | A  |     |
| Rosin Oil                       | A      | A | A  |     |
| Rubber Solvent                  | NS     | C | C  |     |
| Rubber Extender Oil             | C      | C | C  |     |
| Safflower Oil                   | A      | A | A  |     |
| Silicone Oil                    | A      | A | A  |     |
| Soap Solutions (skimmings)      | A      | A | A  |     |
| Soapstock (same as detergents)  | A      | A | A  |     |
| Sodium                          | A      | A | A  |     |
| Sodium Aluminate                | C      | A | A  |     |
| Sodium Bichromate               | A      | A | A  |     |
| Sodium Bisulfate Solution       | A      | A | A  |     |
| Sodium Bisulfide (Hydrosulfide) | A      | A | A  |     |
| Sodium Bisulfite Solution       | A      | A | A  |     |
| Sodium Bromide                  | C      | A | A  |     |
| Sodium Carbonate (solution)     | A      | A | A  |     |
| Sodium Chlorate (solution)      | C      | A | A  |     |
| Sodium Chloride                 | A      | A | A  |     |
| Sodium Cyanide (solution)       | A      | A | A  |     |
| Sodium Dichromate (solution)    | C      | A | A  |     |
| Sodium Ferrocyanide Solution    | A      | A | A  |     |
| Sodium Hydrosulfide             | C      | A | A  |     |
| Sodium Hydroxide (solution)     | C      | C | A  |     |
| Sodium Hypochlorite (solution)  | C      | A | A  |     |
| Sodium Nitrate (solution)       | A      | A | A  |     |
| Sodium Silicate                 | A      | A | A  |     |
| Sodium Silicate Solution        | A      | A | A  |     |
| Sodium Sulfide                  | A      | A | A  |     |
| Sodium Sulfide Solution         | A      | A | A  |     |
| Sodium Sulfite Solution         | A      | A | A  |     |
| Sorbitol                        | C      | A | A  |     |
| Soy Bean Oil                    | A      | A | A  |     |
| Spearmint Oil                   | C      | A | A  |     |
| Sperm Oil                       | C      | A | A  |     |
| Steam - 80 psig (156° C)        | A      | A | A  |     |
| Stearic Acid                    | A      | A | A  |     |
| Stearyl Alcohol                 | C      | A | A  |     |
| Styrene                         | C      | A | A  |     |
| Sugar                           | A      | A | A  |     |
| Sugar Solution                  | A      | A | A  |     |

|   | VITON™ | A  | GF | ETP |
|---|--------|----|----|-----|
| Sulfur                                  | A      | A  | A  |     |
| Sulfur Chloride                         | A      | A  | A  |     |
| Sulfur Dioxide                          | C      | A  | A  |     |
| Sulfur Trioxide                         | A      | A  | A  |     |
| Sulfuric Acid                           | C      | A  | A  |     |
| Sunflower Oil                           | C      | A  | A  |     |
| Tall Oil                                | A      | A  | A  |     |
| Tallow                                  | A      | A  | A  |     |
| Tetrachlorobenzene                      | C      | A  | A  |     |
| 1,1,2,2-Tetrachloroethane               | A      | A  | A  |     |
| 1-Tetradecanol                          | C      | C  | C  |     |
| Tetradecanol                            | C      | C  | C  |     |
| Tetraethyl Lead (TEL)                   | A      | A  | A  |     |
| Tetrahydro Benzaldehyde                 | NS     | NS | C  |     |
| Tetrahydrobenzaldehyde                  | NS     | NS | C  |     |
| Tetrahydrofurn (THF)                    | NS     | NS | C  |     |
| Tetrahydrofurfuryl Alcohol              | NS     | NS | C  |     |
| Therminol                               | A      | A  | A  |     |
| Thionyl Chloride                        | C      | A  | A  |     |
| Tin Tetrachloride (Stannic Chloride)    | A      | A  | A  |     |
| Titanium                                | A      | A  | A  |     |
| Titanium Dioxide (Slurry)               | C      | C  | C  |     |
| Titanium Tetrachloride                  | A      | A  | A  |     |
| Toluene                                 | C      | A  | A  |     |
| Tricetin                                | NS     | C  | A  |     |
| Tributoxyethyl Phosphate                | C      | A  | A  |     |
| Tributyl Phosphate                      | NS     | C  | A  |     |
| Toluene Diisocyanate (TDI)              | NS     | NS | C  |     |
| Toluene/Xylene Mixture                  | C      | A  | A  |     |
| Ortho-Toluidine                         | NS     | C  | C  |     |
| Tomato Paste                            | A      | A  | A  |     |
| Transformer Oil (petro or mineral base) | C      | C  | C  |     |
| Tributylamine                           | NS     | NS | C  |     |
| 1,2,3 -Trichlorobenzene                 | C      | A  | A  |     |
| 1,2,4 -Trichlorobenzene                 | C      | A  | A  |     |
| 1,3,5 -Trichlorobenzene                 | C      | A  | A  |     |
| 1,1,1 -Trichloroethane                  | A      | A  | A  |     |
| Trichloroethylene                       | A      | A  | A  |     |
| lTrichloromonofluoromethane             | C      | C  | -  |     |
| Trichlorotrifluoroethane                | NS     | C  | C  |     |
| Tricresyl Phosphate                     | A      | A  | A  |     |
| Tridecyl Alcohol                        | C      | A  | A  |     |

**A = Acceptable**  
**C = Caution - Depends on Condition**  
**NS = Not Suitable**

|   | VITON™ | A  | GF | ETP |
|---|--------|----|----|-----|
| Tridecylbenzen  | C      | C  | A  |     |
| Triethanolamine   | NS     | NS | C  |     |
| Triethylamine   | NS     | NS | C  |     |
| Triethylene Glycol  | C      | A  | A  |     |
| Triethylenetetramine                                      | NS     | NS | C  |     |
| Trimethylacetic Acid<br>(Neopentanoic Acid, Pivalic Acid) | NS     | C  | C  |     |
| Trimethylamine, Anhydrous (TMA)                           | NS     | NS | C  |     |
| Trimethylamine, Aqueous                                   | NS     | NS | C  |     |
| Tripropylene Glycol                                       | C      | A  | A  |     |
| Tung Oil  | A      | A  | A  |     |
| Turpentine  | C      | A  | A  |     |
| Tween 80 (20% @70° C)                                     | A      | A  | A  |     |

|                      | VITON™ | A  | GF | ETP |
|----------------------|--------|----|----|-----|
| Urea                 | A      | A  | A  |     |
| Urea Solution        | C      | A  | A  |     |
| n-Valeraldehyde      | NS     | NS | C  |     |
| Valeric Acid         | A      | A  | A  |     |
| Vegetable Oil        | A      | A  | A  |     |
| Vinyl Acetate        | NS     | NS | C  |     |
| Vinyl Butyl Ether    | NS     | C  | C  |     |
| Vinyl Chloride (VCM) | C      | A  | A  |     |
| Vinyl Ether          | NS     | C  | C  |     |
| Vinyl Ethyl Ether    | NS     | C  | C  |     |
| Vinyl Methyl Ether   | NS     | C  | C  |     |
| Vinyl Resin          | A      | A  | A  |     |
| Vinylidene Chloride  | A      | A  | A  |     |

|                        | VITON™ | A | GF | ETP |
|------------------------|--------|---|----|-----|
| Waste Water            | C      | A | A  |     |
| Wax                    | C      | A | A  |     |
| Whiskey                | A      | A | A  |     |
| Wood Sugar Molasses    | A      | A | A  |     |
| meta-Xylene            | C      | A | A  |     |
| para-Xylene            | C      | A | A  |     |
| Xylidine               | NS     | C | C  |     |
| Zinc Chloride Solution | A      | A | A  |     |
| Zinc Sulfate           | A      | A | A  |     |



Partner of Viton,™ a Brand of  
The Chemours Company

For further information please contact one of the offices below, or visit our website at [www.Chemours.com/viton](http://www.Chemours.com/viton)

**Global Headquarters - Wilmington, DE USA**

Tel. +1-800-853-5515  
 +1-302-792-4000  
 +1-302-792-4450

**European Headquarters - Geneva**

Tel. +41-22-717-4000  
 Fax. +41-22-717-4001

**South & Central America Headquarters - Brazil**    **Asia Pacific Headquarters - Singapore**

Tel. +55-11-4166-8978  
 Fax. +55-11-4166-8989

Tel. +65-6275-9383  
 Fax. +65-6275-9395

The information set forth herein is furnished free of charge and is based on technical data that The Chemours Company believes to be reliable. It is intended for use by persons having technical skill, at their own discretion and risk. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any material, evaluation of any compound under end use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on any patents. While the information presented here is accurate at the time of publication, specifications can change. Please check [www.dupont-dow.com](http://www.dupont-dow.com) for the most up-to-date information.

**Caution:** Do not use in medical applications involving permanent implantation in the human body. For other medical applications, discuss with your Chemours Company customer service representative and read Medical Caution Statement H-69237.

Viton® is a registered trademark of The Chemours Company FC, LLC used under license by Newman Sanitary Gasket Company  
 Chematic® is a registered trademark of Dober Chemical Corp.  
 CIP 220® is a registered trademark of STERIS Corp.



P.O. Box 222, Lebanon, OH 45036 • 513-932-7379 • Fax: 513-932-4493 • [www.newmangasket.com](http://www.newmangasket.com)