Chemical Compatibility Chart

Chemical	AdvantaFlex	APST	APSH/APSW	LIM Silicone	APHP
Acetic acid	B	B	B	B	B
Acetone	D	B	B	B	B
Acetonitrile	D	D	D	D	D
Acrylonitrile	X	D	D	D	D
Ammonium Sulfide	B	A	A	A	A
Benzene	D	D	D	D	D
Bleach	A	B	B	B	B
Boric Acid	B	A	A	A	A
Carbonic Acid	D	A	A	A	A
Chlorobenzene	D	D	D	D	D
Chloroform	D	D	D	D	D
Dichloromethane (DCM)	D	D	D	D	D
Diethylamine	X	B	B	B	B
Dimethyl Formamide (DMF)	C	B	B	B	B
Dimethyl Sulfoxide (DMSO)	X	D	D	D	D
Dioxane	X	D	D	D	D
Ether	D	D	D	D	D
Ethyl Acetate	D	C	C	C	C
Ethyl Alcohol	B	B	B	B	B
Ethylene Glycol	B	A	A	A	A
Formaldehyde	A	B	B	B	B
Formic Acid 50%	B	C	C	C	C
Gasoline	D	D	D	D	D
Glycerine	B	B	B	B	B
Heptane	C	D	D	D	D
Hexane	B	D	D	D	D
Hydrochloric Acid (HCL) 50%	B	D	D	D	D
Hydrofluoric Acid (HF) 50%	A	D	D	D	D
Hydrogen Peroxide 50%	B	B	B	B	B
Iodine	D	A	A	A	A
Isopropyl Alcohol	B	A	A	A	A
Methyl Alcohol	A	A	A	A	A
Methyl Ethyl Ketone (MEK)	B	D	D	D	D
Methylene Chloride	D	D	D	D	D
Nitric Acid 50%	B	D	D	D	D
Pentane	B	D	D	D	D
Perchloric Acid 50%	A	D	D	D	D
Phenol 50%	D	D	D	D	D
Phosphoric Acid 50%	A	D	D	D	D
Picric Acid	D	D	D	D	D
Potassium Hydroxide	A	C	C	C	C
Sodium Hydroxide 50%	C	B	B	B	B
Sodium Peroxide	A	D	D	D	D
Sodium Thiosulfate	X	A	A	A	A
Sulfuric Acid 50%	A	D	D	D	D
Tetrahydrofuran (THF)	D	D	D	D	D
Toluene	D	D	D	D	D
Trifluoroacetic Acid (TFA) 50%	X	D	D	D	D
Xylene	D	D	D	D	D

Ratings Key

A = Excellent no swelling

B = Good compatibility, small swelling <10%

C = Adequate swelling < 25%

D = Inadequate swelling > 25%

X = No data available

All ratings are based on room temperature of 70° F (21° C). Chemical resistance may be affected by elevated temperatures.

This chemical compatibility chart is a general guide for NewAge® Industries AdvantaPure products. There are many factors that can affect the chemical compatibility of a product therefore, it is the user's responsibility to test under their own conditions. Chemicals can affect the strength, surface appearance, color, flexibility, weight, and dimensions of a product. The basic modes of interaction that can cause changes are:

1. Chemical attachment to the polymer chain, which can result in changes to physical properties including oxidation; reaction of functional groups in or on the chain and depolymerization.

2. Physical changes to the product, including absorption of solvents, which may result in softening and swelling of the material, permeation of solvent through the product, or dissolution in a solvent.

3. Stress cracking from the interaction with internal and/or external stresses. It is recommended to perform an immersion test before choosing a material for critical applications.

Note: This chemical compatibility chart contains recommendations for combinations of elastomeric materials in contact with various corrodents and other environmental conditions. All results are believed to be based on valid laboratory, field tests, or experience. It is the user's responsibility to ensure the suitability and safety of NewAge Industries AdvantaPure products for all intended uses. The user is responsible for any required testing. Any data supplied by NewAge Industries AdvantaPure is provided as a helpful guideline and is believed to be reliable; however, nothing stated shall constitute a guarantee, recommendation, or warranty for any application. All advice is given and accepted at the user's risk.

***Additional compatibility data may be available upon request for chemicals not shown on this chart. This chart is based on commonly used industry chemicals.**