

## **Chemical Compatibility Chart**

Acetic acid Acetonic	Chemical	AdvantaFlex	APST: NI-201	APSH/APSW: NI-202	APSPH: NI-205	LIM Silicone Compound: NI-206	APHP: NI-210	APLT: NI-211	APLT LIM: NI-212
Accidentiale D D D D D D D D D D D D D D D D D D D	Acetic acid	В	В	В	В	В	В	В	В
Ammonium Sulfide	Acetone	D	В	В	В	В	В	В	В
Ammonium Sufficie	Acetonitrile	D	D	D	D	D	D	D	D
Binester   D	Acrylonitrile	Х	D	D	D	D	D	D	D
Blesch	Ammonium Sulfide	В	Α	А	Α	А	Α	Α	Α
Blesch	Renzene	D	D	D	D.	D	D	D	D
Boric Acid									
Chlorobenzene									
Chlorobenzene	Carbonic Acid	D	Α	Α	Α	Α	Α	Α	Α
Chloroform					_		_		_
Dichloromethane (DCM)									
Dimethyl Formanide (DMF)	Chloroform	D	D	D	D	D	D	D	D
Dimethyl Formanide (DMF)   C   B   B   B   B   B   B   B   B   B	Dichloromethane (DCM)	D	D	D	D	D	D	D	D
Dimethyl Sulfoxide (DMSO)	Diethylamine	х	В	В	В	В	В	В	В
Diosene	Dimethyl Formamide (DMF)	С	В	В	В	В	В	В	В
Ether	Dimethyl Sulfoxide (DMSO)	х	D	D	D	D	D	D	D
Ethyl Acctate									
Ethyl Alcohol				D	D			D	
Ethylene Glycol	Ethyl Acetate	D	С	С	С	С	С	С	С
Formic Acid 50%	Ethyl Alcohol	В	В	В	В	В	В	В	В
Formic Acid 50%	Ethylene Glycol	В	Α	Α	Α	Α	Α	Α	Α
Gasoline	Formaldehyde	А	В	В	В	В	В	В	В
Glycerine	Formic Acid 50%	В	С	С	С	С	С	С	С
Glycerine	Gasoline	D	D	D	D	D	D	D	D
Heptane								В	
Hydrochloric Acid (HCL) 50%		С	D	D	D	D	D	D	D
Hydrofluoric Acid (HF) 50%	Hexane	В	D	D	D	D	D	D	D
Hydrogen Peroxide 50%   B   B   B   B   B   B   B   B   B	Hydrochloric Acid (HCL) 50%	В	D	D	D	D	D	D	D
Iodine	Hydrofluoric Acid (HF) 50%	А	D	D	D	D	D	D	D
Sopropyl Alcohol   B	Hydrogen Peroxide 50%	В	В	В	В	В	В	В	В
Methyl Alcohol         A         D	lodine	D	Α	Α	Α	Α	Α	Α	Α
Methyl Ethyl Ketone (MEK)         B         D <td>Isopropyl Alcohol</td> <td>В</td> <td>Α</td> <td>Α</td> <td>Α</td> <td>Α</td> <td>Α</td> <td>Α</td> <td>Α</td>	Isopropyl Alcohol	В	Α	Α	Α	Α	Α	Α	Α
Methylene Chloride         D	Methyl Alcohol	Α	Α	Α	Α	A	Α	Α	Α
Nitric Acid 50%         B         D	Methyl Ethyl Ketone (MEK)	В	D	D	D	D	D	D	D
Pentane         B         D </td <td>Methylene Chloride</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td>	Methylene Chloride	D	D	D	D	D	D	D	D
Pentane         B         D </td <td>Nitric Acid 50%</td> <td>В</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td>	Nitric Acid 50%	В	D	D	D	D	D	D	D
Perchloric Acid 50%         A         D									
Phenol 50%         D					_	_		_	_
Phosphoric Acid 50%         A         D									
Picric Acid         D <th< td=""><td></td><td>_</td><td></td><td></td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td></th<>		_			_	_	_	_	_
Potassium Hydroxide         A         C         D	<u> </u>								_
Sodium Hydroxide 50%         C         B		D	D	D	D		D	D	D
Sodium Peroxide         A         D         D         D         D         D         D         D         D           Sodium Thiosulfate         X         A         D         <	Potassium Hydroxide	Α	С	С	С	С	С	С	С
Sodium Thiosulfate         X         A         D		С	В	В	В	В	В	В	В
Sulfuric Acid 50%         A         D         D         D         D         D         D         D         D           Tetrahydrofuran (THF)         D		Α	D	D	D	D	D	D	D
Tetrahydrofuran (THF)         D							Α	Α	Α
Toluene         D         D         D         D         D         D         D         D         D           Trifluoroacetic Acid (TFA) 50%         X         D									
Trifluoroacetic Acid (TFA) X D D D D D D D									
50% X B B B B B B B		D	D	D	D	D	D	D	D
Xylene D D D D D D		x	D	D	D	D	D	D	D
Additional Compatibility data is available upon varyost should it not be available on this short. This short is based on company year industry shomicals.*									D

## Ratings Key

- A = Excellent no swelling
- B = Good compatibility, small swelling <10%
- C = Adequate swelling < 25%
  D = Inadequate swelling > 25%
- Y = No data available

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

This Chemical Compatibility Chart is a general guide that belongs to 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 can be:

- 1. Chemical attach on the polymer chain, with can result in physical properties, including oxidation; reaction of functional groups in or on the chain and depolymerization.
- 2. Product physical changes, including absorption of solvents, resulting in softening, and swelling of the plastic, permeation of solvent through the product, 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 tube 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 warranty for any application. All advice is given and accepted at the user's risk.

<sup>\*</sup>Additional Compatibility data is available upon request should it not be available on this chart. This chart is based on commonly used industry chemicals\*