



PRODUCT DATA SHEET

NOVITANE® • SHEETING • CONVEYOR BELTING • CUSTOM PRODUCTS

NOVITANE® CHEMICAL RESISTANCE GUIDE

The following chemical resistance guide has been developed to assist in determining if **NOVITANE** polyurethane is the appropriate elastomer for a particular service application. An elastomer's resistance to degradation by a particular chemical depends on such factors as temperature, aeration, velocity of flow, duration of exposure, stability of the chemical, degree of contact, etc. Ideally, the **NOVITANE** polyurethane product should be subjected to actual service conditions in order to determine if it is suitable, however, if it is not practical to do so, then tests should be devised that simulate actual service conditions as closely as possible. The following tabulation should only be used as a guide.

<u>CHEMICAL</u>	<u>NOVITANE POLYURETHANE</u>	<u>CHEMICAL</u>	<u>NOVITANE POLYURETHANE</u>
Acetaldehyde	C	Calcium Hypochlorite (20%)	C
Acetic Acid, 20%	B	Carbon Dioxide	A
Acetic Acid, 30%	C	Carbon Monoxide	A
Acetic Acid, glacial	C	Carbon Tetrachloride	C
Acetone	C	Castor Oil	A
Aluminum Sulfate	A	Chlorine Gas (wet)	C
Ammonium Chloride	A	Chloroform	C
Ammonium Hydroxide	A	Chlorosulfonic Acid	C
Ammonium Sulfate	A	Chromic Acid (10-50%)	C
Amyl Acetate	C	Citric Acid Solutions	A
Aniline	C	Copper Chloride Solutions	A
ASTM Oil #1 (158 deg. F)	A	Copper Sulfate Solutions	A
ASTM Oil #3 (158 deg. F)	B	Cottonseed Oil	A
ASTM ref. Fuel A	A	Cyclohexane	A
ASTM ref. Fuel B	B	Dibutyl Phthalate (158 deg)	C
ASTM ref. Fuel C	C	Diethyl Sebacate	C
Barium Hydroxide	A	Diethyl Phthalate	C
Beer	A	DOWTHERM A	B
Benzene	C	Ethyl Acetate	C
Borax Solution	A	Ethyl Alcohol	C
Boric Acid Solutions	A	Ethyl Chloride	C
Butane	A	Ethyl Ether	C
Butyl Acetate	C	Ethylene Dichloride	C
Calcium Bisulfite	A	Ethylene Glycol	B
Calcium Chloride	A	Ferric Chloride Solutions	A

CHEMICAL**NOVITANE
POLYURETHANE****CHEMICAL****NOVITANE
POLYURETHANE**

Formaldehyde, 40%	C	Phosphoric Acid, 20-70%	A
Formic Acid	C	Phosphoric Acid, 85%	C
Freon - 11 (130 deg. F)	B	Pickling Solution	C
Freon - 12 (130 deg. F)	A	(17-20% Nitric Acid, 4% HF)	
Freon - 22 (130 deg. F)	C	Picric Acid	B
Freon - 113	A	Potassium Dichromate	A
Furtural	C	Potassium Hydroxide	B
Gasoline	B	Pydraul 312 C	C
Glue	A	SAE #10 Oil (158 deg. F)	A
Glycerin	A	Sea Water	A
n-Hexane (122 deg. F)	B	Silicone Grease	A
Hydrochloric Acid, 20%	B	Soap Solutions	A
Hydrochloric Acid, 37%	C	Sodium Chloride	A
Hydrofluoric Acid, 48-75%	C	Sodium Dichromate, 20%	A
Hydrofluoric Anhydrous	C	Sodium Hydroxide, 20%	A
Hydrogen	A	Sodium Hydroxide, 46%	B
Isooctane (158 deg. F)	B	Sodium Hydroxide, 50-73%	C
Isopropyl Alcohol	C	Sodium Hypochlorite, 5-20%	C
Isopropyl Ether	B	Sodium Peroxide Solutions	C
JP-4	B	Soybean Oil	B
JP-5	C	Stearic Acid	A
JP-6	C	Styrene	C
Kerosene	B	Sulfuric Acid, 5-10%	A
Linseed Oil	B	Sulfuric Acid, 10-95%	C
Lubricating Oils	B	Sulfuric Acid, Fuming	C
Magnesium Chloride	A	(20% Oleum)	
Magnesium Hydroxide	A	Sulfurous Acid	C
Mercury	A	Tannic Acid, 10%	A
Methyl Alcohol	C	Tartatic Acid	A
Methyl Ethyl Ketone	C	Tetrahydrofuran	C
Methylene Chloride	C	Toluene	C
Mineral Oil	A	Tributyl Phosphate	C
Naphtha	B	Trichloroethylene	C
Naphthalene	B	Tricresyl Phosphate	B
Nitric Acid, 10-70%	C	Triethanolamine	C
Nitric Acid, Red Fuming	C	Trisodium Phosphate	A
Nitrobenzene	C	Tung Oil	B
Oleic Acid	B	Turpentine	C
Oleum, 20-25%	C	Water (12 deg. F)	A
Palmitic Acid	A	Water (212 deg. F)	C
Perchloroethylene	C	Xylene	C
Phenol	C	Zinc Chloride Solutions	A

RATING KEY

A - Little or No Effect with 0-2% swell.

B - Minor to Moderate Effect with 3-15% swell.

C - Severe Effect with over 15% swell.