

Polyurea – Typical Chemical Resistance, Extended Exposure

Table 2 - Chemical Resistance per ASTM D 3912

<u>Chemical</u>	<u>12 Month Exposure</u>
Methanol	Slight swelling, <48 hours
Gasoline	Slight surface change, no softening
Diesel fuel	No visible damage
Toluene	Slight swelling, <24 hours
MTBE	Slight surface change
5% MTBE/Gasoline	Slight surface change
Motor oil	Slight surface change, no softening
Hydraulic fluid	Slight surface change, no softening
2-methylbutane	No visible damage
Water - room temperature	No visible damage
Water 82° C, 14 days	No visible damage
10% NaCl/water - room temp.	No visible damage
10% NaCl/water 50° C, 14 days	No visible damage
10% sugar/water	No visible damage
Sulfuric acid 5%	No visible damage
Sulfuric acid 10%	No visible damage
Sulfuric acid 3%, 50° C, 14 days	No visible damage
Hydrochloric Acid 5%	No visible damage
Hydrochloric Acid 10%	No visible damage
Phosphoric Acid 10%	No visible damage
Ammonium Hydroxide 10%	No visible damage
Ammonium Hydroxide 20%	No visible damage
Sodium Hydroxide 10%	No visible damage
Sodium Hydroxide 20%	No visible damage
Sodium Hydroxide 50%	Slight surface discolor, no softening
Sodium Hydroxide. 1%, 50° C, 14 days	Slight surface discolor, no softening
Potassium Hydroxide 10%	No visible damage
Potassium Hydroxide 20%	Slight surface discolor, no softening
Acetic acid 10%	No visible damage

Results based on 50% immersion, 25 degrees C exposure for one year.

Note: These results do not pertain to a specific formulation of polyurea, and should not be construed as specific test data for all types; however, these are representative results for 100% solids aromatic, plural-component pure polyurea. Consult with your manufacturer for product-specific test results.

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Polyurea – Typical Chemical Resistance, Normal Exposure

Table 1 - Chemical Resistance per ASTM D 1308

<u>Chemical</u>	<u>Aromatic</u>	<u>Aliphatic</u>
Acetone	A	A
Brake fluid	B	C
Clorox	NR ¹	A
Dimethyl Formamide	NR	NR
Gasoline, unleaded	A	A
Hexane	A	A
Hot tub water ²	B	A
Hydraulic oil	A	C
Methanol	A	C
5% Methanol/gasoline	A	C
Motor oil	B ¹	B ¹
Propylene carbonate	C	C
Sodium hydroxide, 5%	A	A
10%	A	A
25%	A	A
50%	B ¹	B ¹
Sulfuric acid 5%	A	B
10%	B	B
50%	NR	NR
Concentrate	NR ³	NR ³
Vinegar, 5% acetic acid	A	B
Water	A	A

Code describing chemical's effect on elastomer – 7 day exposure except as noted:

A - No visible damage

B - Little visible damage

C - Some effect - swelling, discoloration, cracking

NR - Not recommended

¹ - Some discoloration only

² - Brominated water

³ - Less than 24 hour exposure

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