Table 1-1. Chemical Resistance.

	Amorphous Polymers						Semi-Crystalline Polymers			
Chemicals	**LEXAN® resin**	**CYCOLOY® resin**	**CYCOLAC® resin**	**GELOY® resin**	**NORYL® resin**	**ULTEM® resin**	**XENOY® resin**	**VALOX® resin**	**NORYL GTX® resin**	**SUPEC® resin**
Hydrocarbons										
aliphatic	–/•	•	+	+	•/–	+	•	+	+	++
aromatic	–	–	–	–	–	++	–/•	+	+	
halogenated										
fully	•	•	–	–	–	+	–	–/•	+	•
partly	–	–	–	–	–	–	–	–	•	•/+
Alcohols	+	n	+	+	+	+	+	+	+	++
Phenols	–	–	–	–	–	–	n	–	–	+
Ketones	–	–	–	–	–	–	–	•/+	•	+
Amines	n	–	–/•	•	–/•	n	n	n	–	•/+
Esters	–/•	–	•	•	+	•/+	–	•/+	+	++
Ethers	–	–	•	•	•	+	n	+	+	+
Acids										
inorganic	–/•	•	+	+	•	•/+	•/+	+	•	•/+
organic	•	•	–	–	•	•/+	•/+	•	•	+
oxidizing	–	–	–	–	•	•	•/+	–	•	•
Alkalis	–	•	+	+	+	–	–	–	+	+
Automotive fluids										
Greases (non-reactive organic esters)	n	+	+	+	•/+	+	+	++	+	++
Oils (unsaturated aliphatic mixtures)	n	•/–	•/+	•/+	•/+	+	++	++	+	++
Waxes (heavy oils)	n	+	+	+	•/+	+	+	++	+	++
Petrol	–	–	–	–	–	+	++	++	+	++
Cooling liquid (glycol)	n	•	•	•	+	+	++	++	+	++
Brake fluid (heavy alcohol)	n	–	–	–	+	–	++	+	+	++
Detergents, Cleaners	n	•/+	•/+	+	•/+	+	+	+	++	++
Water										
hot (< 80˚C)	–/•	•/+	–/•	•/+	++	–/•	•	–	–	•/+
Environmental										
UV	•/+	•/+	•/+	++	•	+	•/+	+	–/•	–

++ very good found unaffected in its performance with regard to time, temperature and stress – according to agency requirements

\+ good found acceptable in normal exposure – long term exposure may result in minor loss of properties – higher temperatures may result in major loss of properties

• fair found marginal – only for short exposures at lower temperatures or when loss of mechanical properties is not critical

– poor found unacceptable – will result in failure or severe degradation

n not tested

Ratings as shown are based on controlled tests and are purely indicative. Finished part performance must always be evaluated on the actual part in the end-use environment.