

- INSTRUCTIONS FOR ALL CATEGORIES OF BARRIERS -

● RESISTANCE TO CHEMICALS

The materials were tested by an independent professional chemist using commercial solvents. The table below shows the results of trials made with the materials constituting the barrier. If a single element (such as the sewing thread or other) proved unsatisfactory during the trials, the results as a whole were rejected. It should be taken into consideration, however, that the physical properties of some solvents can be altered when they are mixed with water, creating a thermal reaction that can cause the barrier materials to melt.

	Solvent	Categories WA and WL	Category WP	
Inorganic Acids	Hydrochloric acid or Aqueous hydrogen chloride	12 hours resistant	12 hours resistant	
	Hydrofluoric acid or Hydrogen fluoride	12 hours resistant	12 hours resistant	
	Anhydrous hydrobromic acid or Hydrogen bromide	12 hours resistant Discoloration	12 hours resistant	
	Nitric acid or Hydrogen nitrate	Not recommended	12 hours resistant	
	Phosphoric acid or Orthophosphoric acid	12 hours resistant	12 hours resistant	
	Sulfuric acid	Not recommended	Not recommended	
	Bases	Sodium hydroxide or Caustic soda	12 hours resistant Major repairs	12 hours resistant Major repairs
Hydrocarbons	Gasoline, Diesel, Oil	12 hours resistant	12 hours resistant	
Non-polar Solvents	Petroleum ether or Petroleum benzine or Light ligroin or Rubber solvent or Naphtha n-Hexanes or Dipropyl	12 hours resistant Major repairs	12 hours resistant	
	p-Xylene or Thinner fast dry TY25635	12 hours resistant	12 hours resistant	
	Toluene or Toluol	12 hours resistant	12 hours resistant	
	Chloroform or Trichloromethane	Not recommended	12 hours resistant	
	Dichloromethane or Methylene chloride	Not recommended	12 hours resistant	
	Polar Solvents	Acetone or Methyl ketone	Not recommended	12 hours resistant
		Acetic acid (glacial)	12 hours resistant	12 hours resistant
Ethanol or Ethyl alcohol		12 hours resistant	12 hours resistant	
Methanol or Methyl alcohol		12 hours resistant Inspection	12 hours resistant	
Formaldehyde or Formic aldehyde		12 hours resistant Inspection	12 hours resistant	
Methyl ether ketone or Ethyl methyl ketone		Not recommended	12 hours resistant	
Tetrahydrofuran or Butane		Not recommended	12 hours resistant	
Others	Ethyl acetate or Acetic acid ethyl ester	Not recommended	12 hours resistant	
	Acetic anhydrous or Acetic acid anhydride	12 hours resistant	12 hours resistant	
	Paint thinner	12 hours resistant Inspection	12 hours resistant	
	Ammonium hydroxide or Ammonia solution	12 hours resistant	12 hours resistant	
	Hydrogen peroxide or Hydrogen dioxide	12 hours resistant	12 hours resistant	
	Calcium hydroxide	12 hours resistant	12 hours resistant	
	Ferric chloride (anhydrous) or Iron trichloride	12 hours resistant	12 hours resistant	
	Sodium hypochlorite (5%) or Bleach	12 hours resistant	12 hours resistant	

12 hours resistant:
Not recommended:
Inspection:
Major repairs:

The Water-Gate will resist for 12 hours
The Water-Gate is not resistant to this fluid
Check for possible alterations of the containment shell (appearance, rigidity)
Degradation of the containment shell