



01.10.2013

## Recommendation on chemical resistance

Protective gloves **LLG-Labware® Nitrile ergo** for single use have been tested in accordance with EN 374-3 "Determination on resistance to permeation by chemicals"

Chemicals (Synonyms)	LLG-Labware® Nitril ergo
Acetic acid (10%) (Methyl carbon acid)	Level 6
Acetone (2-Propanone)	x
Acetonitrile (Cyanomethane, Ethyl nitrile)	x
Acryl amide (40 %) (Acrylic acid amide)	Level 6
Ammoniumhydroxid (25 %)	
Benzalconiumchloride liquid (Quats)	
Chlorhexidingluconat (0,5%) in ethanol and water	
Chloroform (Trichloromethane)	x
Cyclohexanol (Hexalin / at 23°C)	
Dichloromethane (Methylene chloride, Freon 30)	x
Diethyl amine (DEA)	x
Diethyl ether (Diethyloxyde, Ethoxyethane)	x
Dimethylsulfoxide DMSO	x

Chemicals (Synonyms)	LLG-Labware® Nitril ergo
Ethanol (20%) (Ethyl alcohol)	Level 1
Ethanol (40 %) (Ethyl alcohol)	A
Ethanol (70 %) (Ethyl alcohol)	A
Ethanol (80 %) (Ethyl alcohol)	A
Ethanol p.a. (Ethyl alcohol)	
Ethidium bromide (1%) (Homidium bromide)	Level 6
Ethyl acetate (Aceto acid ether)	x
Formaldehyde (37%) with Methanol (10%) (Formalin, Methyl aldehyde)	Level 1
Gasoline (heavy, bp 150 -190 °C)	x
Glutaraldehyde (5%) (Pentane-1,5- dial, Glutaral)	Level 6
Hydrochloric acid (36%)	A
Hydrofluoric acid (40%)	
Isopropyl alcohol (40%) (2- Propanol, Isopropanol, IPA)	Level 1

Isopropyl alcohol (70%) (2- Propanol, Isopropanol, IPA)	<b>Level 1</b>
Isopropyl alcohol p.a. (2- Propanol, Isopropanol, IPA)	
Linseed oil	
Methanol (5%) (Methyl alkohol)	
Methanol p.a. (Methyl alcohol)	<b>x</b>
n-Heptane (CAS 142-82-5)	<b>x</b>
n-Hexane (CAS 110-54-3)	<b>A</b>
Nitric acid (10%)	<b>Level 6</b>
Nitric acid (36%)	<b>Level 6</b>
Nitric acid (50%)	<b>A</b>

Phenol (10%) (Carbolic acid, Benzenol, Hydroxybenzene)	<b>A</b>
Phenol (80%) (Carbolic acid, Benzenol, Hydroxybenzene)	<b>A</b>
Phosphoric acid (30%) (Orthophosphoric acid)	<b>Level 6</b>
Potassium hydroxide (30%) (Caustic potash, lye)	<b>Level 6</b>
Sodium hydroxide (30%) (Caustic soda, Lye, White caustic)	<b>Level 6</b>
Sodium hydroxide (40%) (Caustic soda, Lye, White caustic)	<b>Level 6</b>
Sulphuric acid (96%) (Vitriol)	
Toluene (Methylbenzol, Toluol, Phenylmethane)	<b>x</b>
Trichlorethane (Methyltrichloromethane)	<b>x</b>
Xylene (Dimethylbenzene, Xylol)	<b>x</b>

<b>X not recommended</b>
<b>A for splash contact recommended – change glove immediately after contact</b>
<b>Level 1 for short contact up to 30 min recommended</b>
<b>Level 2 for contact up to 60 min recommended</b>
<b>Level 3 for contact up to 120 min recommended</b>
<b>Level 4 for contact up to 240 min recommended</b>
<b>Level 5 for contact up to 480 min recommended</b>
<b>Level 6 for contact longer than 480 min recommended</b>
<b>Without – no data available</b>

**Disclaimer:** LLG wants to state that the values for the permeation levels for all LLG-Labware gloves are based on tests performed in laboratory under fixed conditions and cannot reflect all actual “in use”-circumstances. As a rule, tests and certificates can only be regarded as general information and will not discharge the user from his duty to make sure before the use that the glove will correspond to his actual protection needs. When working with materials harmful to the skin before starting to work please always check the glove for any defects. Recommendation on chemical resistance is not part of the specification.

If there is any doubt please ask at your supplier.