

Ultranitril 454

| Chemical Product | CAS # | Breakthrough time (minutes) | Permeation level | Standard | Degradation level | Rating |
|---|------------|-----------------------------|------------------|-----------------|-------------------|--------|
| 2-Propanol (Isopropanol) 99% | 67-63-0 | 43 | 2 | EN 374-3:2003 | 4 | + |
| Acetic acid 80% | 64-19-7 | 43 | 2 | EN 374-3:2003 | 1 | - |
| Acetone 99% | 67-64-1 | 1 | 0 | EN 374-3:2003 | 1 | - |
| Ammonium hydroxide solution 25% | 1336-21-6 | 23 | 1 | EN 16523-1:2015 | NT | NA |
| Bleach 12° | 7681-52-9 | NT | NT | | 4 | NA |
| Cyclohexane 99% | 110-82-7 | NT | NT | | 1 | NA |
| Formaldehyde 37% | 50-00-0 | 480 | 6 | EN 16523-1:2015 | 3 | ++ |
| Fuel oils mixture | 68476-34-6 | 155 | 4 | EN 374-3:2003 | 4 | ++ |
| Hydrochloric acid 10% | 7647-01-0 | NT | NT | | 4 | NA |
| Hydrochloric acid 35% | 7647-01-0 | 450 | 5 | EN 374-3:2003 | 4 | ++ |
| Hydrogen peroxide 30% | 7722-84-1 | 480 | 6 | EN 16523-1:2015 | 4 | ++ |
| Methanol 99% | 67-56-1 | 9 | 0 | EN 374-3:2003 | 2 | - |
| Methyl Ethyl Ketone (2-Butanone) 99% | 78-93-3 | NT | NT | | 1 | NA |
| Naphtha, Hydrodesulphurized Heavy mixture | 64742-82-1 | NT | NT | | 2 | NA |
| Naphtha, Hydrotreated Heavy mixture | 64742-48-9 | 86 | 3 | EN 374-3:2003 | NT | NA |
| Nitric acid 10% | 7697-37-2 | 480 | 6 | EN 374-3:2003 | NT | NA |
| Nitric acid 20% | 7697-37-2 | 480 | 6 | EN 374-3:2003 | 3 | ++ |
| Phosphoric acid 75% | 7664-38-2 | 480 | 6 | EN 374-3:2003 | 4 | ++ |
| Sodium hydroxide 20% | 1310-73-2 | 480 | 6 | EN 374-3:2003 | 4 | ++ |
| Sodium hydroxide 40% | 1310-73-2 | 480 | 6 | EN 374-3:2003 | 4 | ++ |
| Sodium hydroxide 50% | 1310-73-2 | 480 | 6 | EN 374-3:2003 | NT | NA |
| Sodium Metabisulfite 20% | 7681-57-4 | 480 | 6 | EN 374-3:2003 | 2 | + |
| Sulfuric acid 10% | 7664-93-9 | 480 | 6 | EN 374-3:2003 | 4 | ++ |
| Sulfuric acid 40% | 7664-93-9 | 480 | 6 | EN 374-3:2003 | 4 | ++ |
| Sulfuric acid 50% | 7664-93-9 | 480 | 6 | EN 374-3:2003 | 4 | ++ |

*not normalized result

Overall Chemical Protection Rating

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

■ Used for **high chemical exposure** or chemical immersion, limited to breakthrough time based on a working day.

■ Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative breakthrough time based on a working day.

■ **Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.

■ **Not recommended**, these gloves are deemed unsuitable for work with this chemical.

□ NT : Not tested

■ NA : Not applicable because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time



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| Toluene 99% | 108-88-3 | 1 | 0 | EN 374-3:2003 | 1 | - |
| Unleaded gasoline mixture | 8006-61-9 | 3 | 0 | EN 374-3:2003 | 1 | - |

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