



# Black Knight

# GAUNTLET

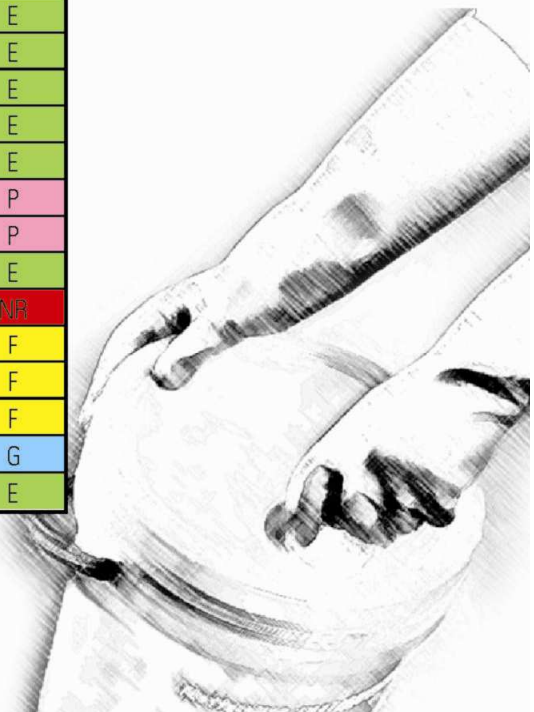
## BLACK KNIGHT GAUNTLET

CHEMICAL	EN 374-3 Class	Avg. BTT (min)	% degradation	Performance Rating
1. 1,4 Dioxane 99%	0	4	23	F
2. Acetaldehyde 99%	1	11	11	G
3. Acetic Acid 99%	6	>480	1	E
4. Acetone, 99%	0	9	9	G
5. Acetonitrile 99%	6	>480	3	E
6. Acrylic Acid, 99%	6	>480	1	E
7. Ammonium Fluoride, 50%	6	>480	3	E
8. Ammonium Hydroxide, 28%	6	>480	1	E
9. Amyl Acetate, 99%	1	27	55	NR
10. Aniline, 99%	3	72	14	G
11. Aqua Regia, 100%	6	>480	6	E
12. Benzaldehyde, 99%	2	38	43	P
13. Benzene, 99%	0	6	45	P
14. Benzo(a)pyrene 99%	6	<480	6	E
15. Butyl Acetate, 99%	1	15	56	NR
16. Butyl Alcohol, 99%	3	64	3	E
17. Butyl Cellosolve, 99%	1	12	4	E
18. Butyrolactone	6	>480	11	G
19. Carbon Disulfide, 99%	0	3	22	F
20. Carbon Tetrachloride, 99%	1	11	47	P
21. Cellosolve Acetate, 99%	2	39	4	E
22. Cellosolve Solvent, 99%	2	39	22	F
23. Chromic Acid, 99%	6	>480	2	E
24. Citric Acid, 10%	6	>480	4	E
25. Cyclohexanol, 99%	4	234	8	E
26. Diacetone Alcohol, 99%	3	79	1	E
27. Dibutyl Phthalate, 99%	6	>480	5	E
28. Diisobutyl Ketone, 99%	2	37	47	P
29. Dioctyl Phthalate, 99%	6	>480	43	P
30. Epichlorohydrin, 99%	6	>480	0	E
31. Epoxy Resins	6	>480	51	NR
32. Ethanethiol, 99%	1	12	30	F
33. Ethyl Acetate, 99%	1	10	21	F
34. Ethyl Ether, 99%	0	1	2	F
35. Ethylene Dibromide, 99%	0	9	18	G
36. Ethylene Glycol Monomethyl Ether 99%	3	115	1	E

BTT — Breakthrough time  
EN 374-3 — European Union Chemical Permeation Test Standard

EN Class Index	Permeation Time (Minute)
0	< 10 min.
1	> 10 min.
2	> 30 min.
3	> 60 min.
4	> 120 min.
5	> 240 min.
6	> 480 min

**E** Excellent  
**G** Good  
**F** Fair  
**P** Poor  
**NR** Not Recommended





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CHEMICAL	EN 374-3 Class	Avg. BTT (min)	% degradation	Performance Rating
37. Formic Acid, 95%	6	>480	3	E
38. Furfural, 99%	6	>480	4	E
39. Gluteraldehyde, 5%	6	>480	1	E
40. Hexamethyl Disilazane, 99%	3	67	37	P
41. Hydrochloric Acid, 37%	6	>480	5	E
42. Hydrofluoric Acid, 48%	6	>480	1	E
43. Hydrogen peroxide, 30%	6	>480	0	E
44. Isobutyl Alcohol, 99%	3	85	2	E
45. Isooctane, 99%	6	>480	35	F
46. Isopropyl Alcohol, 99%	2	55	4	E
47. Kerosene, 99%	0	9	22	F
48. Lactic Acid, 85%	6	>480	3	E
49. Lauric Acid, 36%	6	>480	1	E
50. Maleic Acid Sat.%	6	>480	6	E
51. Methyl Alcohol, 99%	6	>480	1	E
52. Methyl Ethyl Ketone, 99%	4	166	14	G
53. Nitric Acid, 70%	6	>480	8	E
54. Nitrobenzene, 99%	6	>480	24	F
55. Nitropropane, 99%	6	>480	13	G
56. N,N-Dimethylacetamide, 99%	3	87	7	E
57. N,N-Dimethylformamide, 99%	4	123	0	E
58. Palmitic Acid Sat.	6	>480	1	E
59. Pentachlorophenol Sat.	6	>480	5	E
60. Phenol, 99%.	4	181	19	G
61. Phosphoric Acid, 85%.	6	>480	16	G
62. Potassium Cyanide, 99%	6	>480	5	E
63. Sodium Hydroxide, 50%	6	>480	2	E
64. Styrene, 99%	0	9	14	G
65. Sulfuric Acid, 47%	6	>480	2	E
66. Tetrahydrofuran, 99%	0	6	50	P
67. Thioethyl Alcohol, 99%	1	12	10	E
68. Thiophene, 99%	0	8	13	G
69. Toluene, 99%	0	5	18	G
70. Turpentine, 99%	2	48	63	NR
71. Xylene, 99%	0	7	72	NR

Data shown from the following charts are the results of laboratory test as per ASTM/EN standard and are intended to serve as a guide only. The data is obtained from samples collected randomly.

The data is not an absolute basis for glove selection as testing was done in strict laboratory conditions. Actual working conditions may dictate the performance of the product. Factors such as glove reuse, thermal conditions, chemical mixtures, abrasion, cuts and punctures may also affect the performance of the glove.

It is also noted that permeation and degradation do not always correlate. A glove may have a good result in permeation breakthrough time but it may degrade (swell, gets weaker or softer) easily, thus rated P/NR. There are cases whereby the glove may be badly damaged by the chemical, in this case permeation breakthrough time is not applicable as the glove will not offer any protection to end use. End users are advised to do their evaluation when selecting a glove for a specific application in an actual working condition.

This chart does not serve as a warranty for the performance of the glove in any specific work application.

**NOTE: DATA IN THIS GUIDE REFERS TO RUBBEREX BLACK KNIGHT GAUNTLET ONLY**

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