

A man with a beard and safety glasses is focused on his work in a workshop. He is wearing a dark blue t-shirt and white work gloves with grey palms. He is using a red-handled screwdriver to work on a metal surface. In the background, there are shelves with yellow storage bins. A green rectangular object is visible on the work surface.

INDUSTRY GUIDE



TRANSPORT

ANSELL PROTECTION SOLUTIONS FOR INDUSTRY PROCESSES

Ansell is dedicated to worker safety: we provide a comprehensive range of hand, arm and body protection solutions to cover needs across many industries. Before selecting a product, ensure a risk assessment of the hazards has been conducted to determine that the product will provide an appropriate level of protection. Ansell Guardian® Chemical can be consulted to provide an assessment of the level of chemical protection offered by our products and may assist in the risk assessment. The determination of suitability of Ansell hand, arm and body protection solutions is the final responsibility of the user.

EN 388 – Mechanical protection

This standard applies to all kinds of protective gloves in respect of physical and mechanical aggressions caused by abrasion, blade cut, puncture and tearing.

Performance level rating		1	2	3	4	5	
 EN 388:2003 abcd	a Abrasion Resistance (Cycles)	100	500	2000	8000	–	
	b Blade Cut Resistance (Coupe Test/Index)	1.2	2.5	5.0	10.0	20.0	
	c Tear Resistance (Newtons)	10	25	50	75	–	
	d Puncture Resistance (Newtons)	20	60	100	150	–	
Expanded performance level rating according to EN 388:2016 (a–f)		A	B	C	D	E	F
 EN 388:2016 abcdef	e EN ISO Cut Resistance (Newtons)	2	5	10	15	22	30
	f EN Impact Protection	PASS or FAIL					

Note: Level X can also be applied for a through e above, which means “not tested” or “not applicable”

EN 388:2016: main changes from the previous EN 388:2003 standard

1. ABRASION

New abrasion paper used in testing.

2. CUT







New procedure for Coupe Test which also determines if dulling occurs. If dulling occurs, the new EN ISO 13977 test method becomes the reference whilst the Coupe Test would only be indicative.


3. IMPACT

Test method for areas claiming impact protection. “P” for pass whilst no code will apply in case of fail.

EN ISO 374 – Chemical protection and/or protection against micro-organisms

This standard specifies the capability of gloves to protect the user against chemicals and/or micro-organisms.

Micro-organisms								
<div>EN 374:2003</div> <div></div> <div>EN level ≥ 2</div> <div>EN ISO 374-5:2016</div> <div></div> <div>VIRUS</div>	Performance levels	1	2	3				
	<p>Old: AQL (Acceptable Quality Level) for liquid penetration. A high index number is poor and a low index number is good. Gloves need to pass water and air leak test, and this test method remains unchanged as per the new EN ISO 374 standard.</p> <p>New: in addition to testing for protection from bacteria and fungi, each glove can be tested for its protection against viruses with a new viral penetration test.</p>	4.0	1.5	0.65				
Chemical protection								
<div>EN 374:2003</div> <div></div> <div>XYZ</div> <div>EN ISO 374-1:2016</div> <div>Type C</div> <div></div> <div>EN ISO 374-1:2016</div> <div>Type B</div> <div></div> <div>XYZ</div> <div>EN ISO 374-1:2016</div> <div>Type A</div> <div></div> <div>UVW XYZ</div>	<p>Old: breakthrough time > 30 minutes for at least three chemicals from this list (XYZ represent the code letters for three of these chemicals for which the glove obtained > 30 minutes breakthrough time).</p> <p>New:</p> <p>Type C At least Level 1 performance (more than 10 minutes) against at least one chemical on the list – cuffs are also tested.*</p> <p>Type B At least Level 2 performance (more than 30 minutes) against at least three chemicals on the list – cuffs are also tested.*</p> <p>Type A At least Level 2 performance (more than 30 minutes) against at least six chemicals on the list – cuffs are also tested.*</p>	<p>A. Methanol B. Acetone C. Acetonitrile D. Dichloromethane E. Carbon disulphide F. Toluene</p> <p>Additional chemicals</p> <p>M. Nitric acid 65% N. Acetic acid 99% O. Ammonium hydroxide 25%</p>	<p>G. Diethylamine H. Tetrahydrofuran I. Ethyl acetate J. n-Heptane K. Sodium hydroxide 40% L. Sulphuric acid 96%</p> <p>P. Hydrogen peroxide 30% S. Hydrofluoric acid 40 % T. Formaldehyde 37%</p>					
	Performance level	0	1	2	3	4	5	6
	Minutes	< 10	10	30	60	120	240	> 480

 The beaker icon (low chemical resistance/waterproof) has been eliminated.

* Only if the glove is ≥ 40 cm



TRANSPORT INDUSTRY PROCESSES



1. WAREHOUSING & SHIPPING

Applications:

- Driving forklifts
- Loading/ unloading trucks and vehicles
- Handling incoming/ outgoing goods

User needs:

- Medium to high abrasion protection
- High dexterity and flexibility
- Oil repellence and grip



HyFlex® 11-531



HyFlex® 11-840



HyFlex® 11-926



2. BOARDING SERVICES

Applications:

- Handling luggage
- Driving forklifts
- Handling pallets

User needs:

- Medium to high abrasion protection
- High visibility
- Wet grip



ActivArm® Hi-Viz™ 97-012



HyFlex® 11-724



HyFlex® 11-840



3. MECHANICAL MAINTENANCE

Applications:

- Assembly and disassembly of equipment
- Equipment repair and maintenance
- Repair and replacement of network equipment

User needs:

- Abrasion, cut and puncture protection
- Dexterity, tactility
- Oil repellence and grip



HyFlex® 11-818



HyFlex® 11-926



HyFlex® 11-539



4. CHEMICAL MAINTENANCE

Applications:

- Cleaning body parts
- Handling lubricants and cleaners
- Painting and repairing

User needs:

- Chemical protection
- Grip in both dry and oily environments
- Light to medium mechanical protection



AlphaTec® 58-435



AlphaTec® 58-270



MicroFlex® 93-852



5. FUELLING

Applications:

- Refuelling planes and vehicles
- Decanting tanks
- Inspection and repair

User needs:

- Chemical resistance and grip
- Dexterity, tactility
- Thermal protection



AlphaTec® 58-270



AlphaTec® 58-535B



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Hand Protection Solutions



Body Protection



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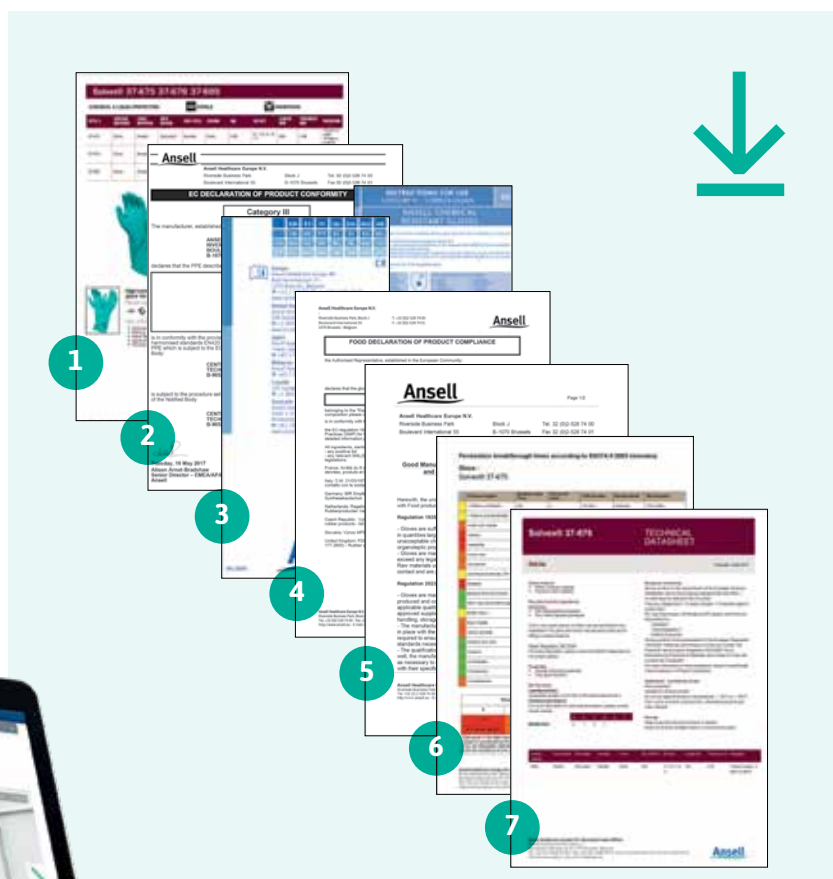
Select the right glove or sleeve that best fits your industry and application.

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