

#### 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.

	chanical protection d applies to all kinds of protective gloves in respec d tearing.	t of physical ar	d mechanica	ıl aggressions	s caused b	y abrasion, bla	de cut,
Performance level rating		1	2	2 3		4	5
EN 388:2003	<b>a</b> Abrasion Resistance (cycles)	100	500	20	000	8000	_
	<b>b</b> Blade Cut Resistance (Coupe Test/Index)	1.2	2.5	5	.0	10.0	20.0
	C Tear Resistance (Newtons)	10	25	5	0	75	-
	<b>d</b> Puncture Resistance (Newtons)	20	60	10	00	150	-
Expanded performance level rating according to EN 388:2016 (a–f)		A	В	С	D	E	F
EN 388:2016	e EN ISO Cut Resistance (Newtons)	2	5	10	15	22	30
abcdef	<b>f</b> 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 **Performance levels** 1 2 3 Old: AQL (Acceptable Quality Level) for liquid penetration. A high 쥏 4.0 1.5 0.65 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 FN level > 2 unchanged as per the new EN ISO 374 standard. New: in addition to testing for protection from bacteria and fungi, each glove can be tested for its protection against viruses with a 忿 new viral penetration test. **Chemical protection** G. Diethylamine Old: breakthrough time > 30 minutes for at least three A Methanol B. Acetone H. Tetrahydrofurane chemicals from this list (XYZ represent the code letters C. Acetonitrile I. Ethyl acetate for three of these chemicals for which the glove obtained D. Dichloromethane J. n-Heptane > 30 minutes breakthrough time). K. Sodium hydroxide 40% E. Carbon disulphide F Toluene L. Sulphuric acid 96% Type C At least Level 1 performance (more than 10 minutes) **Additional chemicals** against at least one chemical on the list - cuffs are also tested.\* P. Hydrogen peroxide 30% M Nitric acid 65% N. Acetic acid 99% S. Hydrofluoric acid 40 % Type B At least Level 2 performance (more than 30 minutes) T. Formaldehyde 37% O. Ammonium against at least three chemicals on the list - cuffs are also tested.\* hydroxide 25% **Type A** At least Level 2 performance (more than 30 minutes) against at least six chemicals on the list - cuffs are also tested.\* Performance level 0 2 3 4 5 6 1 Minutes 10 30 60 120 240 > 480 < 10

#### **MACHINERY & EQUIPMENT INDUSTRY PROCESSES**



#### 1. PRESS SHOP

#### **Applications:**

- Seizing structural and body parts
- Inspection
- Feed the press and remove spare parts from it

#### **User needs:**

- High abrasion resistance
- Medium to high cut protection
- Dry or oil grip





HvFlex® 11-735



HvFlex® 11-927



RINGERS R-065

5. PAINT SHOP

## 2. BODY SHOP

#### **Applications:**

- Seizing structural and body parts
- Assembling big parts together by
- Riveting

#### **User needs:**

• Medium to high cut protection

HvFlex® 11-738

HyFlex® 11-927

ActivArmr® 43-216

- Dry or oil grip
- Medium to high dexterity



#### 3. MACHINING

#### **Applications:**

- Seizing rough blocks and cylinders
- Assembling and mounting components
- Inspection in each circumstance

HvFlex® 11-724

#### **User needs:**

- Medium to high cut resistance
- Dry or oil grip
- Oil repellence



#### 4. MOLDING

#### **Applications:**

- Seizing and finishing structual parts
- Inspection in each circumstance

#### User needs:

- High abrasion resistance
- · High cut resistance
- Contact heat resistance (80 to 100°C)



ActivArmr® 80-813





HyFlex® 70-225\* (ex. Neptune® Kevlar®)



HyFlex® 11-937







#### 6. FINAL ASSEMBLY

#### **Applications:**

- · Body surface checking, marking and touching up
- Applying sealer on body
- Painting or cleaning tools or robots

#### **User needs:**

- Paint-compatible gloves
- Ability to feel surface for abrasion
- Chemical resistance (painting/ cleaning)

## **Applications:**

- Seizing structural parts
- · Adjusting systems and screwing using wrenches
- Fixing, clipping parts and wire harnesses

#### **User needs:**

- · High abrasion
- Low to medium cut protection
- · Medium range dry and oil grip

## ♣ 7. LOGISTICS

AlphaTec® 1600 PLUS

(ex. MICROGARD®)

#### **Applications:**

- Loading and unloading rough parts or boxes
- Cutting cardboard, picking parts and accessories
- Driving vehicles

#### **User needs:**

- Dry, wet or oily grip
- High dexterity
- · Cold weather protection



## 8. MAINTENANCE

#### **Applications:**

- · Mounting and dismantling
- · Changing tools and dies
- Welding

#### **User needs:**

- Mechanical, chemical, thermal and electrical protection
- · High dexterity and tactility



AlphaTec® 58-735



AlphaTec® 1800 COMFORT\*

(ex. MICROGARD®)

MICROFLEX® 93-260











**RINGERS R-138** 



HyFlex® 11-518



HyFlex® 11-840





**RINGERS R-161** 



E013Y Class 00 11" Yellow



HyFlex® 11-939



HyFlex® 11-816

<sup>\*</sup>There will be a transitional period where there will be a mix of old and newly branded products in the market. Functionality and performance of the products will remain unchanged, the current products and the new ones have the same quality and same protection.

## **GET MORE PRODUCT INFORMATION ONLINE**

Our new website provides content rich of information on safety, solutions, documents and downloads, regulatory and company information with simple navigation of our full portfolio of hand, arm and body protection solutions.

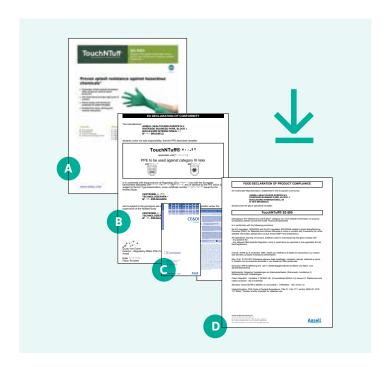
**★** www.ansell.com/industrial

#### **PRODUCT INFORMATION**



# Your search options also include various downloadable data sheets:

- A Product sheets
- **B** EU declarations conformity
- C Instructions for use
- Food declarations of product conformity



## **INDUSTRIAL SECTION**

## Explore the new search and navigation features for a seamless web experience:

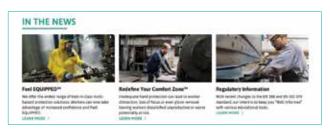
1 Ansell Solutions by type of protection



3 Newsletters: Safety Briefing



News & Campaigns



4 Ansell Solutions by Industries



# FOR FURTHER INFORMATION OR TO REQUEST A SAMPLE, CONTACT YOUR SALES REPRESENTATIVE.

