PERSONAL PROTECTIVE EQUIPMENT

The EU market for protective gloves

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Report summary
This CBI market survey discusses the following highlights for the EU market for protective gloves:

- In 2006, total industrial demand for protective gloves amounted to € 1,972 million. The market size grew 2.9% annually during the period 2003-2007 and a further growth of the same level is expected in 2008 and 2009.
- The high level of import activity, mainly imports from developing countries (DCs), in the last decade has seen the demise of glove manufacture in a number of companies, most notably in Italy, Germany, France and Spain. The types of gloves, which are produced in the EU, fall into the category of the more expensive quality gloves.
- Interesting EU distribution channels for exporters in DCs are: importers, distributors or wholesalers and manufacturers, who want to expand their assortment.
- The EU imported 23 billion pairs of leather, rubber and textile gloves in 2007, valued at € 2,028 million. Imports in volume increased 33% in 2007 compared to 2005 and in value by 18%. Imports of protective gloves can be characterised as very price-competitive: average import prices were 11% lower in 2007 compared to 2005.
- The share of DC imports increased 20% (in absolute terms) to 68% of the EU imported value of protective gloves in the period 2005-2007 and accounted for 95% of imports from outside the EU in 2007. DCs, in particular Asian countries dominate EU imports of protective gloves. Malaysia and China (each country 21% of total imports) remained by far the most important suppliers of protective gloves, followed by Thailand (8%), India and Sri Lanka. China dominates EU imports of protective gloves, made of leather, textiles and plastic, while Malaysia accounts for surgical and rubber gloves other than surgical and household gloves.

This survey aims to provide developing-country exporters of protective gloves with product-specific market information related to gaining access to the EU market(s). By focusing on the EU market(s) for one product(group), this document provides additional in-depth information, complementary to the more general information and data provided in the CBI market survey 'The personal protective equipment market in the EU', which can be downloaded from http://www.cbi.eu/marketinfo.

Detailed information on the selected products is given in appendix A. This survey discusses the EU in general and the following major markets in particular: Germany, France, United Kingdom, Italy, Spain and The Netherlands.

1 Market description: industrial demand and production

Industrial demand

Based on production or technical level, there are two separate markets for protective gloves:

1. The market for rubber/latex and synthetic (nitrile, neoprene and vinyl) gloves. Gloves based on polymeric (including elastomeric) materials may be textile-supported and /or unsupported and vary from lightweight surgical grades to heavyweight gauntlets. These gloves are manufactured and distributed principally by companies operating on a worldwide basis, with some additional competition from European companies. This broad range of gloves includes surgeon's and examination, household and other gloves for many purposes as described in appendix A
2. The second market is that for the (knitted) textile and leather glove. There is significant import of the cheaper basic variety of gloves of this type. Many established European

manufacturers have found it difficult to compete and a number of them have left the business. Those European companies which remain committed to the textile and leather glove business have upgraded the traditional manufacturing technologies. In particular, they concentrate on the more high-technology type of application. This includes the use of high-technology textiles for specialist applications and gloves for heat-resistant and anti-vibration applications.

Despite the sluggish global economy, demand for protective gloves increased annually 2.9% in value during the period 2003-2007. The protective gloves market in the EU, in particular those made of leather, can be characterised as saturated. Expenditure increased to a slower degree than imports, which leads to strong competition, in increasing product differentiation from the side of established (brand) manufacturers and in price from the side of private label manufacturers and/or importers.
Table 1.1 shows the size of the EU market for protective gloves during the period 2003-2007 and forecasts for 2009. The annual growth rate for EU countries can be estimated at 6.0% over the period 2007-2009 to reach almost € 2.1 billion in 2009.
In 2007, total industrial demand for protective gloves amounted to € 1,972 million. The market size grew from a figure of about € 1,770 million in 2003.

Table 1.1 Expenditure on protective gloves in the EU, 2003-2009, in € million

	2003	2005	2007	Annual change 2003-2007	2009 forecasts
Germany	288	297	306	+1.6%	315
United Kingdom	255	268	285	+3.0%	300
France	228	236	244	+1.8%	255
Italy	214	221	228	+1.6%	235
Spain	127	138	147	+3.9%	158
The Netherlands	76	78	81	+1.6%	85
Belgium	52	53	55	+1.4%	57
Other EU countries (20)	530	572	626	+4.5%	685
EU total	**1,770**	**1,863**	**1,972**	**+2.9%**	**2,090**

Sources: Eurostat, Frost & Sullivan and trade estimates

Major product groups in the EU for protective gloves are:
- Mechanical protection gloves, of which total purchases are estimated at € 830 million in 2007. This product group includes leather gloves (cheap and offering minimal protection), textile gloves and technical fibre gloves of aramide and other such fibres;
- Chemical/biological protection gloves, market size of € 675 million and include polymers like nitrile, latex, PVC and some other materials like neoprene and blends of polymers;
- Thermal protection gloves, market size € 355 million, including leather gloves, technical fibre gloves and gloves for welding and firemen;
- Product protection had a market size of € 85 million and include polymer-textile and polymer gloves;
- Special protection gloves represent only € 25 million and include anti-vibration electrical hazard protection, chainsaw gloves and anti-syringe gloves.

Market segmentation criteria in the market for personal protective equipment (PPE) in total, as well as for protective gloves, are: labour force (number and gender of employees), end-user sectors and types of buying organisations. More information about these criteria can be found at the CBI survey 'The personal protective equipment market in the EU'.

End-usage included the market for household latex gloves, of which a proportion is used as PPE. Although the overall growth projections are modest in the glove sector as a whole, some manufacturers of synthetic gloves project an improvement in sales from such products at the expense of other glove types, particularly leather. According to Notified Bodies, one of the reasons cited is the difficulty associated with the CE marked status for leather gloves, because of inconsistencies in raw materials.

Production

Official statistical information about production of protective gloves in the EU is limited. No statistics are available on the production of surgical and household gloves.

Table 1.2 EU production of protective gloves, 2003-2007, in € million

	2003	2005	2007 forecasts
Leather gloves	60.6	44.0	43.8
Rubber gloves	42.7	27.1	27.0
Knitted textiles, coated etc.	44.2	37.6	34.2
Woven textiles	26.9	16.8	15.4
Total	**174.4**	**125.5**	**120.4**

Source: derived from Prodcom/Eurostat

The high level of import activity, mainly imports from DCs, in the last decade has seen the demise of glove manufacture in a number of companies, most notably in Italy, Germany, France and Spain. Some companies have looked for other markets. The types of gloves, which are produced in the EU, fall into the category of the more expensive quality gloves. Apart from general industrial gloves, speciality items are produced, such as heat-resistant gloves. Those manufacturers complete their range of gloves offered to the market by purchasing imported goods.
The largest rubber/latex and synthetic glove manufacturers with global operations are Ansell (http://www.ansellhealthcare.com) and Mapa Professionnel (http://www.mapa-professionnel.com).

Ansell Europe (http://www.anselleurope.com) is the central European commercial operation of Ansell International Australia. This group manufactures in 6 countries. The company specialises in latex and synthetic gloves, both supported (with textiles) and unsupported and has a strong position in surgeon's and examination gloves. In addition to the protective products division, which handles industrial gloves, a healthcare division has interests in medical-glove technology and a consumer division in household gloves and condoms.
Mapa Professionnel, which specialises also in the latex and synthetic sector, is part of the Hutchinson Group. That group is a long-established organisation in the European rubber technology business. Hutchinson is part of the Total Group and is a European market leader in the industrial rubber sector. Worldwide, Mapa has six manufacturing locations; only one is located in Europe: France. The European technical centre is also in France.

Other European glove manufacturers include (list not exhaustive):
Germany: KCL (Kächele Cama Latex) GmbH (http://www.kcl.de), now part of the US-based Norcross Group; Georgi Handschuhfabrik GmbH & Co. (http://www.walter-georgi.de); Köninger Arbeitsschutz GmbH (http://www.koeninger.de); Profas GmbH, part of Uvex (http://www.profas.com); Seiz (http://www.seiz.de); Uvex (http://www.uvex-safety.de) and Asatex AG (http://www.asatex.eu).

France: Sperian, former name: Bacou-Dalloz SA (http://www.sperianprotection.com); Comasec, including Marigold Industrial (http://www.comasec.com); Delta Plus (http://www.deltaplus.eu); Guyard SA (http://www.guyard-sa.fr); Procovès Industrie SA (http://www.wleiprocoves.com); Espuna et Cie SA (http://www.espuna.fr) and MB Protection (http://www.mb-protection.fr).

United Kingdom: Bennett Safety Wear Ltd. (http://www.bennettsafetywear.co.uk); Marigold Industrial (http://www.marigoldindustrial.com); Polyco Ltd. (http://www.polyco.co.uk) and CAC Industrial Products (http://www.cac-industrial.co.uk).

Italy: 2G di Gemignani Giulio (http://www.2g-quanti.com) and Ariete Group S.p.A. (http://www.arietegroup.com).

Spain: Iberica Materiales de Proteccion SA (http://www.belt.es) and Igartex SL (http://www.igartex.com).

The Netherlands: DSM Dyneema (http://www.thesofterstrength.com) and North Safety Products Europe (http://www.northsafety.com).

The following brand names for protective gloves (non-exhaustive list) operate on the European market: Ansell, Ansell Perry (and many other brands of this group, like Conform and Gammex), Mapa, KCL, Marigold, Profas, Prevent, Maximm, Polar Bear, Riby, Chainex, Rehamij, SSL, Jomac, Coasta II, Pioneer and Sempermed.

Opportunities and threats

Opportunities

- Germany is still the largest market for PPE, followed by United Kingdom and France. Per capita expenditure is high in the UK, Germany, France and the Scandinavian countries. The highest growth rates are expected in 'new' EU countries (like Poland, the Czech Rep. Slovakia and Hungary).
- Increasing awareness by corporations of the need to protect employees combined with the upgrading of the level of protection provided by gloves. Cheaper gloves are being replaced with better quality materials.
- Growing personal acceptance of the use of protective gloves. In some countries, mainly South European, where use of gloves was previously not widely accepted, attitudes of employees are changing.
- The protective gloves market showed a growth of the powder-free and synthetic segments to the detriment of latex segments, caused by the following factors: latex sensitivity among healthcare workers; increased awareness of hand hygiene; better infection control; and, substantial cost increases of natural rubber.
- Developments on the textile and leather protective gloves market are the increasing number of product innovations or modifications, mainly based on advantages for end-users or economic advantages for the purchasing organisations.
- In order to establish a serious relationship with a leading importer in the EU, the exporting manufacturer must be very quality-conscious, always punctual in deliveries and honest and straightforward in communications.

Threats

- The protective leather and textile gloves market in the EU is saturated and that makes it very difficult for small producers in DCs to gain entry to the market by offering 'more of the same', which implies very strong price competition.
- The shift of production facilities in EU countries to other areas.
- Increasing competition caused by imports of cheap products.
- Product innovations or modifications require investments.

The same development or trend can be an opportunity for one exporter and a threat for another. Exporters should therefore analyse if the developments and trends discussed in the chapter provide opportunities or threats. The outcome of this analysis depends on each exporter's specific circumstances.

Useful sources

- The website of the European Safety Federation (ESF): http://www.european-safety-federation.org includes links to national organisations.
- A lot of information is given by the leading global and European manufacturers, especially companies like Ansell (http://www.anselleurope.com); Mapa (http://www.mapaglove.com); Comasec (http://www.comasec.com), KCL (http://www.kcl.de) and Bennett Safety Wear Ltd (http://www.bennettsafetywear.co.uk). These sites give extended description of a very broad range of protective gloves, including technical as well as commercial information.

- Participants (including products and addresses) at the leading trade fair A+A (Occupational Safety and Health at Work) in Düsseldorf, Germany can be found on the website http://www.aplusa-online.de.
- Addresses of standards organisations, Notified Bodies, just like addresses of other trade fair organisers, trade magazines and other useful addresses, can be found in the CBI survey 'The personal protective equipment market in the EU' and the link plaza on CBI's website http://www.cbi.eu.

2 Trade channels for market entry

Trade channels

The nature of the market for protective gloves varies with the type of glove. Significant change has occurred in the nature of some of the markets. As with other PPE sectors, the market consists both of glove specialists and of companies which include glove manufacture among other protective equipment. Latex and synthetic gloves are mainly manufactured by large international corporations which have facilities both in Europe and elsewhere in the world. Such companies have a European-wide marketing structure, either through their own companies or by arrangement with various distributors. A number of medium-sized regional European companies is involved in this sector, and these too have export trade in addition to their domestic markets. The EU manufacturers in the protective textile and leather gloves segments, despite their move to production using advanced technologies, meet with more and more competition from exporters in DCs, even in the CE category III. This category includes gloves, which offer protection against high risks, like extreme temperatures (fire-fighters, welders etc.).

The most important suppliers on the market for protective gloves in EU countries are:

- Independent national manufacturing companies often specialised in one specific product group operating on the domestic market and eventually in combination with exporting;
- Manufacturers who complement their range by offering goods from other sources, including imports;
- Manufacturing operations by international companies with headquarters in Europe or outside Europe;
- Manufacturing companies from abroad with manufacturing and/or commercial interests in a specific EU country;
- Importers, specialised in gloves, but in most cases offering a (somewhat) broader PPE assortment;
- Distributors or wholesalers offering a PPE assortment from other sources, including imports.

The best advice to exporters in DCs is to look for any form of co-operation. Some European manufacturers have undertaken joint venture activities with foreign companies, to achieve the combined advantage of cheaper supply sources and quality controlled manufacture. Another possibility is to produce private-label gloves for European importers or distributors. Many imports are still simply purchased on the spot by importers, such as the distribution companies.

Price structure

Differences in materials used, quality level, requirements in CE marking, type of distributor, market level often combined with brand name, volume of purchasing etc. have led to big differences in prices. Due to the diversity in products, it is difficult to focus on prices for individual products. For that reason, prices for protective gloves will not be included.
The list below gives some current average import prices (FOB Shanghai) of Chinese manufacturers' gloves operating at the mid-level of the market.

	Prices per pair in US$
Cow split driver glove, no line, 10'	0.85
Cow grain driver glove, no line, 10'	1.92

	Prices per pair in US$
Driver glove, cow grain palm, cow split back, no line, 10'	1.51
Cow split welder glove, full line, 14'	1.28
Cow split welder glove, no line, 14'	1.04
Gray leather welder glove, no line, 13'	2.33

Sources of price information are given in chapter 5 of the CBI survey 'The personal protective equipment market in the EU'.

Table 2.1 Possible margins in trade of protective gloves

CFR Rotterdam/Amsterdam	100
Import duties	*
Handling charges: transport/insurance, banking services	6
Final charges: warehouse fee and interest on investment	3
	109
Importer's margin	26
Net selling price	135
RATIO CFR/CONSUMER PRICE:	**1.4**

*) import tariffs vary from 0.0 up to 9.0% of CFR value

In general, it can be said that margins in the glove sector (especially in the low-budget categories: cotton, cotton combined with split-leather, rubber surgical and household gloves) are under pressure, due to strong competition caused, among other factors by high stocks; wholesalers' margins vary from 18-30% of the selling price.

Selecting a suitable trading partner

Interesting distribution channels for exporters in DCs are: importers, distributors or wholesalers and manufacturers, who want to expand their assortment. Several websites of manufacturers/distributors are given in the previous chapter. Importing wholesalers can be reached via trade or business directories, available without charge for various European countries in different languages, on websites such as: http://www.kompass.nl; http://www.abc-d.nl; http://www.europages.com. Other possible sources are CBI, trade promotion offices and search engines on Internet, lists of exhibitors at trade fairs, specialised trade magazines etc. A detailed explanation of this has been given in CBI's export manuals.

A good place to make contacts is PPE trade fairs, such as: the German A+A, Occupational Safety and Health Trade fair, which is by far the leading trade fair in the EU. (http://www.aplusa-online.de). Other major PPE trade fairs in the EU are:

Other major PPE trade fairs in the EU are:

Country	Trade fair	Website
Germany	Arbeitsschutz Aktuell	http://www.hinte-messe.de
Finland	Turvallisuus	http://www.tampereenmessut.fi
France	Expoprotection/Fire Exhibition	http://www.expos-protection.com
France	Preventica	http://www.preventica.com
Poland	Sawo	http://sawo.mtp.pl
Spain	Laboralia	http://laboralia.feriavalencia.com
Spain	Sicur	http://www.sicur.ifema.es
Sweden	Skydd, Protection & Security Expo	http://www.skydd.net
UK	Safety and Health Expo	http://www.safety-health-expo.co.uk
UK	International Fire Expo	http://www.fire-expo.co.uk
Czech Rep.	Interprotec	http://www.bvv.cz/interprotec-gb

The lists of exhibitors at these trade fairs are often mentioned at their websites.

The decision of an exporter, as to which market entry strategy can be chosen, depends on many internal (own manufacturing and organisational capabilities etc.) and external (direct or indirect exporting and in the latter case which intermediaries are the most suitable) factors.

3 Trade: imports and exports

Imports

The EU imported 21.6 billion pairs of leather, rubber and textiles gloves in 2007, valued at € 2,028 million. Imports in volume increased 24% in 2007 compared to 2005 and in terms of value by 18%. Imports of protective gloves can be characterised as very price-competitive: average import prices were 5% lower in 2007 compared to 2005.
The growth in imports (in terms of value), during the period 2005-2007, concerned 19% growth by imports into the traditional EU-15 countries and 38% by new EU countries. However, it should be noted that imports by the twelve new EU countries covered less than 10% of total EU imports in 2007.

Table 3.1 Imports and leading suppliers of protective gloves 2003–2007, in € million, share in % of value

	2003 € mln	2005 € mln	2007 € mln	Leading suppliers in 2007 share in % of total imports	Share (%)
Total EU	**1,510**	**1,713**	**2,028**		**100**
Intra-EU:	400	490	576	Belgium (7), Germany (5), France (4), Netherlands (3), Austria (2)	28
Extra-EU ex. DCs:	119	80	77	South Korea (2), USA (1), Hong Kong (<1), Taiwan (<1)	4
DCs:	991	1,143	1,375	Malaysia (21), China (21), Thailand (8), India (5), Sri Lanka (4), Pakistan (4), Indonesia (2), Vietnam (1)	68
Germany	**293**	**307**	**380**		**100**
Intra-EU:	76	87	87	Belgium (6), France (4), Austria (4), Netherlands (4), Czech Rep. (3)	23
Extra-EU ex. DCs:	20	7	8	South Korea (1), USA (<1), Hong Kong (<1)	2
DCs:	197	213	285	Malaysia (24), China (23), Thailand (11), India (6), Sri Lanka (4), Pakistan (4), Indonesia (2), Ukraine (1)	75
France	**217**	**244**	**258**		**100**
Intra-EU:	57	60	75	Belgium (17), Germany (4), Netherlands (3), Italy (2), UK (1), Austria (1)	29
Extra-EU ex. DCs:	15	21	22	South Korea (7), USA (<1), Hong Kong (<1), Taiwan (<1), Japan (<1)	9
DCs:	145	163	161	Malaysia (46), China (14), Thailand (6), India (4), Pakistan (4), Sri Lanka (4), Tunisia (2), Indonesia (2), Vietnam (2), Mexico (1)	62
United Kingdom	**207**	**233**	**257**		**100**
Intra-EU:	46	46	50	Belgium (7), France (5), Germany (2), Austria (1), Netherlands (1), Italy (1)	19
Extra-EU ex. DCs:	9	15	7	South Korea (1), Hong Kong (1), USA (<1), Taiwan (<1)	3
DCs:	152	172	200	Malaysia (36), China (22), Thailand (9), Sri Lanka (5), Pakistan (4), India (1), Indonesia (1)	78
Italy	**181**	**202**	**220**		**100**
Intra-EU:	45	46	47	Belgium (8), France (6), Germany (4), Austria (1), UK (1), Portugal (1)	21
Extra-EU ex. DCs:	4	4	3	South Korea (1), Taiwan (>1), Hong Kong (<1),	2
DCs:	132	152	170	Malaysia (25), China (18), India (11), Indonesia (7), Thailand (6), Sri Lanka (4), Pakistan (4), Vietnam (3)	77
Belgium	**106**	**131**	**164**		**100**
Intra-EU:	35	41	38	Netherlands (7), France (6), UK (5), Germany (3), Sweden (1), Austria (1)	23
Extra-EU ex. DCs:	1	17	22	South Korea (7), USA (5), Hong Kong (1), Taiwan (<1)	14

	2003 € mln	2005 € mln	2007 € mln	Leading suppliers in 2007 share in % of total imports	Share (%)
DCs:	70	73	104	Sri Lanka (16), China (15), Malaysia (11), Thailand (6), Mexico (5), Pakistan (4), India (3), Indonesia (1)	63
Spain	**107**	**116**	**137**		**100**
Intra-EU:	35	41	39	Belgium (8), France (8), Germany (7), Italy (2), Netherlands (1), UK (1), Austria (1)	28
Extra-EU ex. DCs:	2	2	2	South Korea (1), Japan (<1), USA (<1), Taiwan (<1)	2
DCs:	70	73	96	Malaysia (26), China (14), India (12), Pakistan (7), Sri Lanka (4), Indonesia (3), Thailand (3), Vietnam (1)	70
Netherlands	**85**	**101**	**123**		**100**
Intra-EU:	14	18	19	Belgium (8), Germany (3), UK (2), France (1), Slovenia (1), Italy (<1)	15
Extra-EU ex. DCs:	5	3	2	USA (1), South Korea (<1), Hong Kong (<1)	2
DCs:	66	80	102	Malaysia (23), Thailand (22), China (20), India (6), Pakistan (5), Sri Lanka (3), Indonesia (2%), Vietnam (1), Turkey (<1)	83

Source: Eurostat (2008)

Germany is the largest EU importer of protective gloves and accounted for 19% of total EU imports by value in 2007. Imports by all major EU countries grew during the period 2005-2007, of which growth in imports by Belgium (+25%), Germany (+24%) and The Netherlands (+22%) were big and by France (+6%), Italy (+9%) and the UK (+10%) were smaller.

Table 3.2 EU imports of protective gloves by type of materials used, 2003-2007

	Million pairs			Average price in € per 100 pair		
	2003	2005	2007	2003	2005	2007
Rubber	**13,929**	**16,321**	**20,162**			
- surgical	*7,820*	*8,394*	*8,979*	5.04	4.74	4.78
- household	*671*	*971*	*1,811*	14.02	10.64	8.55
- other	*5,438*	*6,956*	*9,372*	5.81	4.70	4.56
Leather	**365**	**420**	**449**	74.61	74.89	81.91
Textiles	**388**	**675**	**966**			
- knitted gloves	*144*	*323*	*451*	99.94	61.35	49.30
- knitted mittens and mitts	*114*	*195*	*322*	91.80	78.89	66.95
- woven	*130*	*157*	*193*	143.78	139.19	109.27
Total	**14,682**	**17,416**	**21,577**			

Source: Eurostat (2008)

The share of DC imports increased 20% (in absolute terms) to 68% of the EU imported value of protective gloves in the period 2005-2007. DCs, in particular Asian countries dominate EU imports of protective gloves. The import share of DCs was 95% of imports from outside the EU in 2007.

Table 3.3 EU imports of protective gloves by leading suppliers, 2007, in million pairs

	million pairs	Leading suppliers (between brackets share in %)
Rubber gloves		
- surgical	8,979	Malaysia (44); Thailand (31); Austria (4); Germany (4); China (4); Indonesia (3); Sri Lanka (3); Netherlands (2); Belgium (1).
- household	1,811	Malaysia (48); China (22); Sri Lanka (10); Thailand (8); Indonesia (3); Germany (2); Italy (2); France (1); Czech Rep. (1).
- other	9,372	Malaysia (55); Indonesia (14); Thailand (13); China (5); Italy (4); Sri Lanka (2); Belgium (2); Germany (1); France (1).
Leather gloves	449	China (53); India (18); Pakistan (13); Germany (2); Netherlands (2); France (2); Czech Rep. (2), Italy (2); Belgium (1).
Textile gloves		

- knitted gloves, coated etc.	451	China (56); Sri Lanka (7); Belgium (6); South Korea (6); Vietnam (4); Malaysia (4); Pakistan (4); Germany (3); Czech Rep. (2).
- knitted mittens and mitts, coated etc	322	China (41); Belgium (13); South Korea (12); Sri Lanka (9); Pakistan (9); France (5); Malaysia (3); Czech Rep. (2); Germany (1).
- woven gloves	193	China (68); Pakistan (9); Germany (3); Belgium (3); India (2); Netherlands (2); South Korea (1); France (1), Italy (1).
Total	**21,577**	

Source: Eurostat (2008)

Malaysia remained by far the most important supplier of rubber gloves, followed by Thailand, China, Indonesia and Sri Lanka. China dominated EU imports of other (than rubber) protective gloves, made of leather, textiles and plastic.

Exports

Total EU exports of protective rubber, leather and knitted textiles gloves amounted to 2.7 billion pairs valued at € 786 million in 2007. 26% of EU exports (in value) came from Belgium, 16% from Germany, 14% from France and 9% from The Netherlands.

Table 3.4 EU exports of protective gloves, 2003-2007, in € million

	2006	2005	2007	Exported product groups in 2007		
				Rubber	Textiles	Leather
Belgium	146	158	206	72	121	13
Germany	83	106	126	72	43	11
France	77	92	110	47	44	19
Netherlands	72	64	74	36	24	14
UK	59	57	53	37	13	3
Austria	64	61	47	35	11	1
Italy	23	27	34	8	19	7
Czech Rep.	15	25	28	9	12	7
Sweden	10	18	27	8	10	9
Spain	10	11	13	7	3	3
Other EU countries (17)	68	57	68	28	25	15
EU	**627**	**676**	**786**	**359**	**325**	**102**

Source: Eurostat (2008)

Re-exports

Belgium imported 556 million pairs of protective gloves and exported 390 million pairs in 2007. The figures for Germany were respectively 4,946 and 1,719 million pairs; France 2,249 and 375 million; The Netherlands 1,195 and 399 million and for Austria 486 and 190 million pairs. The limited domestic production of protective gloves in the EU countries indicates that exports by these countries mainly concerned re-exports: imported products, which are exported to other (mainly other EU) countries. The volume of re-exports can be calculated when national production statistics are available and the destination of production can be divided into domestic sales and exports by industry. Re-exports (in % of total imports) are high in countries like Belgium, The Netherlands, Germany, Austria and France. Re-exports in the other major EU countries are more limited.

Opportunities and threats

Opportunities

- A slightly increased share of 69% of PPE imports into the EU came from DCs in 2007, against 66% in 2003. This percentage was significantly higher for major EU countries like The Netherlands (83%), the UK (78%), Italy (77%) and Germany (75%), but lower for France (62%) and Belgium (63%).
- Imports from DCs will grow faster than total imports in the coming years, mainly to the detriment of re-exports from EU countries.

Threats

- Import prices are still under pressure; average import prices were lower in 2007 than in previous years.

- A further decrease in average import prices will put more pressure on the remaining EU producers, but also on producers in DCs.

Useful sources

- EU Expanding Exports Helpdesk - http://exporthelp.europa.eu ➔ go to: trade statistics
- Eurostat – official statistical office of the EU - http://epp.eurostat.ec.europa.eu ➔ go to 'themes' on the left side of the home page ➔ go to 'external trade' ➔ go to 'data – full view' ➔ go to 'external trade - detailed data'
- Understanding Eurostat: Quick guide to easy comext ➔ http://epp.eurostat.ec.europa.eu/newxtweb/assets/User_guide_Easy_Comext_20080117.pdf
- Euratex bulletins - http://www.euratex.org

4 Price developments

The following trends are visible in prices of protective gloves:

- Pressure on price levels, caused by an increasing concentration of buying power;
- Increasing supply and global sourcing of PPE exert pressure on processing and margins throughout the value chain;
- Cost prices in the processing industry are constantly rising;
- In several EU countries, there is an oversupply situation for protective gloves. The markets are growing at a slower or much slower pace.

Due to the diversity in products, it is difficult to focus on prices for individual products. Prices are influenced by many factors, like: type of distributor, market level often combined with brand name, volume of purchasing and many others. Websites giving price information are mentioned in the surveys, covering individual EU countries. It should be noted that the number of these websites is much smaller than in the UK.
Websites of distributors, including prices, can be found at http://www.cover-up.co.uk, http://www.greenham.com, http://www.stratfords.com and http://www.protecdirect.co.uk.
Remark: prices are in british pound sterling (£).
Prices of competitors can be found by browsing their Internet sites or looking for general sites like http://www.globalsources.com or http://www.alibaba.com

Developments in average import prices per product type varied considerably: prices of rubber gloves decreased, mainly for household gloves; prices of knitted gloves decreased and prices of leather gloves increased.
In addition to table 3.2, the table below showed the differences between the average import prices (at CIF value) for the major EU countries in 2007.

Table 4.1 Average import prices of protective gloves by type of materials, 2007, in € per 100 pairs or per pair

	Rubber per 100 pairs			Leather	Textiles per pair		
	surgical	house-hold	other	per pair	knitted gloves	knitted mittens	woven
EU	**4.78**	**4.46**	**4.56**	**0.82**	**0.49**	**0.67**	**1.09**
Germany	3.42	1.80	1.54	0.68	0.58	0.75	0.78
France	5.17	8.50	4.60	1.25	0.83	0.93	1.89
UK	5.11	1.94	5.00	0.67	0.71	0.96	1.05
Italy	4.83	7.59	2.81	0.89	0.62	0.72	1.52
Belgium	7.71	7.89	2.37	1.06	0.94	0.92	1.69
Spain	5.73	1.03	4.61	0.99	0.82	0.74	1.28
Netherlands	8.18	2.52	4.10	0.69	0.67	1.03	0.94

Source: Derived from Eurostat (2008)

5 Market access requirements

As a manufacturer in a developing country preparing to access an EU country, you should be aware of the market access requirements of your trading partners and the related national

government. Requirements are demanded through legislation and through labels, codes and management systems. These requirements are based on environmental, consumer health and safety and social concerns. You need to comply with EU legislation and have to be aware of the additional non-legislative requirements that your trading partners in the EU might request.
For information on legislative and non-legislative requirements, go to 'Search CBI database' at http://www.cbi.eu/marketinfo, select PPE or protective gloves and an EU country in the category search, click on the search button and click on market access requirements.

Sizes

Sizes range from 6-11 (half sizes are allowed), relating to the hand circumference and hand length. A correct fit can be important to safety, so gloves are sized by reference to an agreed common European hand size.

Glove size	Hand circumference / length (in mm)	Minimum length of glove (in mm)	Glove size in characters
6	152/160	220	S
7	178/171	230	M
8	203/182	240	L
9	229/192	250	XL
10	254/204	260	XXL
11	279/215	270	XXXL

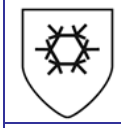
E.g. Size 9 relates to 229 mm and 192 mm for hand circumference and length, respectively and 250 mm length of the glove. If a glove is not of a length specified above, it must be made absolutely clear by the manufacturer that the glove is made to special size to suit a special purpose.

Packaging

Care must be given to the packaging of products if one intends to export to the EU countries. It is obvious that the packaging must be travel-steady. As required, products should also be protected against the elements, changes of temperature, rough handling and theft. Besides these basics of travel- and handle-durability, some importers may have specific demands concerning packaging, like information concerning the order printed on the boxes (order number, box number, name department or contact person etc.).
Gloves are normally purchased container-wise and are therefore press-packed in boxes, depending on the buyer's wishes, of 60-240 pairs per carton, 12 pairs per style in a recyclable or biodegradable plastic bag. In some cases, gloves are packed individually in plastic bags or in the case of surgeon's gloves 1 pair in a sterile pack of coated paper and 120 pairs per carton.
Information about legislation concerning packaging and the treatment of packaging waste can be found on http://www.cbi.eu/marketinfo, while more detailed additional information about packaging techniques and the use of packaging materials can be found on the website of ITC: http://www.intracen.org/ep/packaging/packit.htm.
It is crucial, when planning exports to the EU, to take the packaging of your products (both sales packaging and transport packaging) into consideration. Clear communication with the importer about packaging is necessary to fulfil the requirements of the target market.

Marking

Stringent regulations, besides packaging, govern the marking of protective gloves. Each protective glove should be marked with: glove designation, size and CE marking (see also chapter 1 of the CBI publication: Guidelines for exporting PPE to the EU). The marking should be legible throughout the life of the glove. Very occasionally, marking a glove may reduce its capability: where this is the case the information should be printed on the enclosure which immediately contains the glove. Additional usage information in that case: gloves of simple design will carry the wording "For minimal risk only" and gloves of intermediate and complex design will be marked with one or more pictograms showing the performance levels of the glove against specific risks. An overview of the most important pictograms used for protective gloves as well as a brief description is given below. More information can be obtained from the leading global and European manufacturers.

	Protection against mechanical hazards is expressed by a pictogram followed by four numbers (performance levels), each representing test performance against a specific hazard. Resistance to abrasion; blade cut resistance; tear resistance; puncture resistance. Test defined in EN 388.
	Protective gloves against cold. This standard applies to any gloves to protect the hands against convective and contact cold down to –50 °C. Test defined in EN 511.
	Protective gloves against heat and fire. The nature and degree of protection is shown by a pictogram followed by a series of six performance levels, relating to specific protective qualities. (EN-407)
	Protective gloves against micro-organism. Test defined in EN 374.
	To protect from chemicals and micro-organism. This pictogram must be accompanied by a 3-digit code. The code refers to the code letters of 3 chemicals (from a list of 12 standard defined chemicals), for which a breakthrough time of at least 30 minutes has been obtained. Test defined in EN 374.
	To protect from chemicals and micro-organism. This pictogram shall be used for those gloves that do not achieve a breakthrough time of at least 30 minutes against at least three chemicals from the defined list, but which comply with the Penetration test. Test defined in EN 374
	To protect from ionising radiation, the glove has to be liquid proof and needs to pass the penetration test defined in EN 421.
	To protect from radioactive contamination, the glove has to be liquid proof and needs to pass the penetration test defined in EN 374.

If gloves can be washed, the manufacturer needs to indicate this clearly in the user's manual. As a general rule it should be noted that if, because of cleaning, gloves lose their performance ability, they should be replaced.

The EU common external import tariffs for protective gloves (as percentage of CIF value, without duties and VAT) are given in the table 6.3 of the CBI market survey 'The personal protective equipment market in the EU' and vary from 0.0% to 9.0%. There are no quota restrictions valid for protective gloves. Information on tariffs and quota can be found at http://exporthelp.europa.eu.

6 Doing business

General information on doing business, like approaching potential business partners, building up a relationship, drawing up an offer, handling the contract (such as methods of payment and terms of delivery) can be found in CBI's export manuals 'Export Planner' and 'Your image

builder'. More specific information can be found at the CBI market survey 'The personal protective equipment market in the EU'.
For more information about common practices for sales promotion, including advertising, participation in trade fairs and other forms of communication with buyers, we refer to chapter 4 of the CBI survey 'Guidelines for exporting personal protective equipment to the EU'.
Furthermore, cultural awareness is a critical skill in securing success as an exporter. Information on cultural differences in the EU can be found in chapter 3 of CBI's export manual 'Exporting to the EU'. These manuals can be downloaded from http://www.cbi.eu/marketinfo - go to search publications.

Interesting websites:

- The site of the German trade fair: A+A, Occupational Safety and Health – includes, among others, press releases. See: http://www.aplusa-online.de.
- European Safety Federation (ESF) – http://www.european-safety-federation.org, including links to national organisations.
- Reports and press releases of Frost & Sullivan - http://www.frost.com and Key Note – http://www.keynote.co.uk.
- Several trade magazines, among others: Technical Textiles - http://www.textilesintelligence.com and Company Clothing – http://wwww.company-clothing.co.uk.

Appendix A General product description

Hand gloves are known as protective equipment, which protects that part of the body from the tip of the middle finger to the wrist against hazards. It can additionally cover part of the forearm and arm; however, in these cases it is no longer named a glove but a (fore) arm protector.
Protective gloves shall be designed so that, in the foreseeable conditions of use for which they are intended, the user can perform the hazard-related activity normally whilst enjoying appropriate protection at the highest level of protection. A glove should allow as much dexterity as possible, bearing in mind its purpose. Glove materials, degradation products, incorporated substances, seams and edges and particularly those parts of the glove in close contact with the user shall not harm the user's health and hygiene.

As in the case of clothing, a division can be made between 'traditional' working gloves and protective or safety gloves. The application of traditional working gloves is universal, including consumer activities in and round the house. Materials used for these gloves are:

- based on textiles: heavy-duty woven cotton, plain, dipped, coated or faced with chrome leather. These so-called low-budget gloves are often purchased in large quantities at very low prices; their life cycle is short and their application is universal, being also used for construction work, warehousing, general maintenance work etc;
- based on rubber or latex: household gloves are made from rubber or latex (just like surgical gloves), of which an important part is used for light industrial activities and in the cleaning business;
- based on synthetics, mainly disposables for activities such as painting, self-service at petrol stations, hair-maintenance etc.

Protective or safety gloves are designed for specific working circumstances and cover a wide variety of styles. Choice between protective gloves depends on three factors:

1. The nature of the individual hazard, or combination of hazards, must be determined. These may include: physical damage; penetration; cuts; abrasions; chemical damage; temperature damage (high temperatures and low temperatures); bacterial and viral infections; specific situations and vibration.
2. A selection must be made between a tough, heavy-duty industrial glove and a lighter glove, bearing in mind the general nature of the task to be undertaken.
3. The importance of a number of significant criteria must be assessed. These may include chemical resistance (to oil-based and to water-based chemicals); physical resistance; grip; sensitivity and comfort.

The following materials are used for protective gloves:

- rubber/latex
- synthetics, like neoprene, polyvinyl alcohol, polyvinyl chloride, nitrile, laminate film etc.
- leather
- textiles, like cotton, polyamide or blends and technical textiles like aramides
- other, like metal chain mail and aluminium.

Rubber/latex and synthetic gloves include surgeon's and examination, household and other gloves. Besides the usage in the medical sector, the lightest disposable vinyl or latex gloves are used for short periods in areas such as food preparation, chemical laboratory work, and specialist manufacturing operations (such as pharmaceutical formulation and electronic assembly). A heavier duty unsupported latex glove might be used for heavier duty food preparation, janitorial work or factory maintenance applications. Unsupported synthetic polymer gloves may find application in sectors where greater chemical resistance is required, typified by chemical handling, or other manufacture using chemical products (adhesive manufacture, battery manufacture). The lightest duty supported natural latex gloves

combine long-term usage with comfort in areas not requiring significant chemical resistance; this may include a variety of agricultural work, masonry construction work, and specialised sectors of food processing such as handling frozen foods. When extra grip is designed in the polymer coating, the areas of usage may extend to those such as fishery, forestry, public sector maintenance works and quarrying/mining. Heavy-duty supported synthetic polymer gloves have application for longer duration work with improved chemical resistance in areas such as foundries, paint and varnish manufacture, industrial cleaning and in oil refineries. Particular care is necessary when chemical resistance to specific substances is a requirement. Chemical and bacterial/viral resistant gloves may be made of several materials. Not only is the fundamental chemical resistance of the glove material to the chemical entity of importance, but the question of permeation must also be considered. Permeability is the ability of a chemical to pass through a protective film without entering through obvious pores or defects. Detailed chemical resistance charts are available from several manufacturers and organisations.

Leather gloves are used generally to guard against injuries from sparks or scraping against rough surfaces. Leather is the material most often applied because of its availability, wearing comfort and mechanical strength and because it offers protection against low temperatures and against intermediate high temperatures. For protection against higher levels of risks, materials like Kevlar and Nomex (against high temperatures) and Dyneema and Spectra, eventually aluminised or steel-reinforced leather glove or gauntlet (against cut and puncture hazards) can be used. Leather gloves may be used for medium-duty protection when handling dry goods, typified by steel sheet and pipe handling. Specific applications are welding gloves and gloves for truck drivers. Combinations of leather (for the palm and fingertips) and textiles (for the back) are also applied. The leather qualities used are cow, calf, pig, sheep, goat and buffalo. The textile qualities used are interlock (knits), curled and woven fabric (twills, flat weaves). Cotton is also often used as interlining material.

Textile or fabric gloves, made of cotton, polyamide or blends are generally used to improve grip when handling slippery objects and/or to help insulate hands from mild heat or cold. Knitted gloves of textiles can also have dipped or dotted palms of rubber or PVC to improve cut and slip resistance. The leading styles in cotton and nylon gloves have PVC dots on one side or on both sides, a length of about 25 cm and are seamlessly knitted. Besides general applications, these gloves are recommended for industrial, maintenance, handling, assembly and construction activities. Other leading styles are fully PVC coated gloves of several lengths (from 27 to 60 cm.).
Other categories of protective gloves are: (metal) chain-mail gloves, which are used to protect hands from cuts and scratches, and aluminised gloves designed to insulate hands from intense heat (e.g. working with molten materials).
EU and globally operating manufacturers and many distributors offer detailed guidance on the selection of a suitable glove for a particular application on their website and in brochures. This product survey is not intended to act as a detailed guide. Literature as well as EU directives should be consulted to gather information for giving detailed advice and recommendations to customers and/or end-users.

It has to be noted that in the governmental statistics, no difference is made by end-use or by the types of gloves as described above. For that reason it is difficult, or practically impossible, to analyse the market for gloves other than for the product groups mentioned below. In this survey, two different sets of statistical data are used: Combined nomenclature (CN) and Prodcom. Both sets have been provided by Eurostat, the statistical body of the EU. A detailed description of these sets can be found at chapter 1 of CBI's survey 'The PPE market in the EU'.

The following products and CN code number are used by Customs and for statistical purposes in the EU countries:
4203.29.10 Leather and artificial leather protective gloves for all occupations
4015.11.00 Surgical gloves of vulcanised rubber other than hard rubber
4015.19.10 Household gloves of vulcanised rubber other than hard rubber

4015.19.90 Other gloves of vulcanised rubber other than hard rubber

6116.10.20 Gloves, impregnated, coated or covered with rubber, knitted or crocheted
6116.10.80 Mittens and mitts, impregnated, coated or covered with plastic or rubber, knitted or crocheted and gloves impregnated, coated or covered with plastic, knitted or crocheted
6216.00.00 Gloves of woven textile materials

Plastic gloves do not have a separate CN number but form part of the value of imports shown under 39.26.20.00, which includes plastic clothing and garment accessories of plastic. Plastic gloves are not included in trade statistics in this survey.

The following products and PRODCOM code number are used in this survey:
1824.13.73 Gloves, mittens and mitts impregnated, coated or covered with rubber, knitted or crocheted
1824.31.73 Leather and artificial leather protective gloves for all occupations
2513.60.30 Surgical gloves of vulcanised rubber other than hard rubber
2513.60.55 Household gloves of vulcanised rubber other than hard rubber
2513.60.59 Other gloves of vulcanised rubber other than hard rubber

This survey was compiled for CBI by F&V