Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Naphtha (petroleum), hydrodesulfurized heavy**
CAS No. (if applicable):	**64742-82-1**
AKA / Synonyms / Sub-Groups:	Low boiling point hydrogen treated naphtha, Naptha heavy hydrodesulfurized, Reaction mass of 90622-57-4 and 90622-58-5, Testbenzin 145/200, White Spirit. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H304, H340, H350, H372 GHS08
Industries (NACE R2 code) for which the substance is relevant:	MFR of chemicals (C20), Wholesale & retail trade & repair of motor vehicles etc (G45), Services to buildings and landscape (N81)
Expert evaluation score(s)*	MFR of chemicals: 6 (2,2,2) Wholesale & retail trade & repair of motor vehicles etc: 6 (2,2,2) Services to buildings and landscape: 6 (2,2,2)
Employment characteristics **Total number of employed persons in these industries within the EU 28 (2014/5)** **Trends in employment within industries (2008-2015)**	 MFR of chemicals: 1,100,000 Wholesale & retail trade & repair of motor vehicles etc: 3,825,269 Services to buildings and landscape: 4,640,341 Please see figure 1

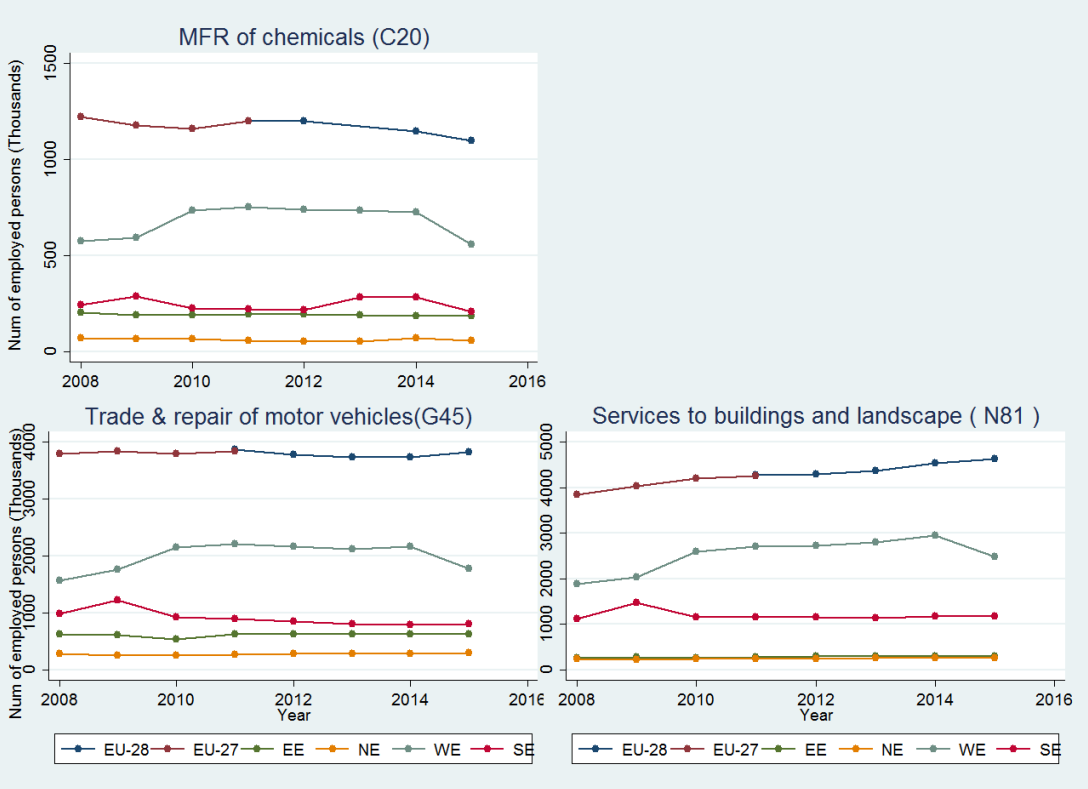

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) and Labour Force Survey (LFS) databases.

Production/use characteristics **Trends in amounts used or manufactured:**	 Please see figure 2

Level 1 Dangerous Substance Data Summary Sheet

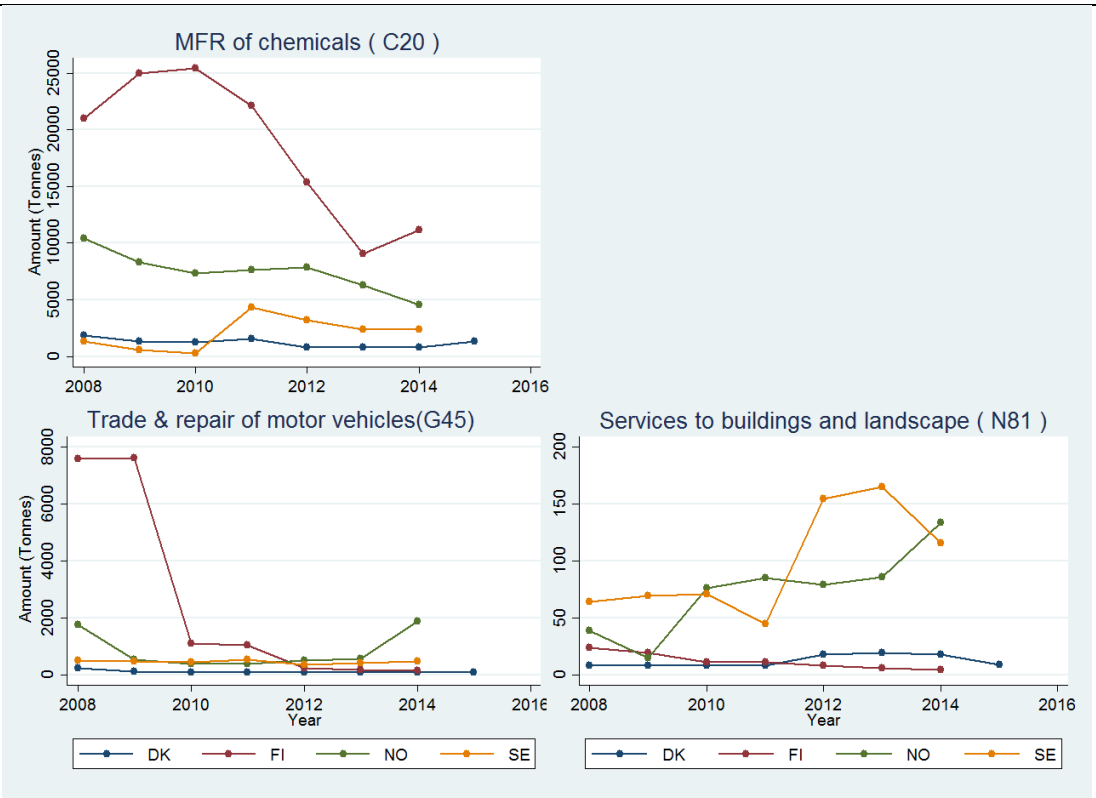

Figure 2 Trends in amounts of Naphtha (petroleum), hydrodesulfurized heavy used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Comments and observations	Use of the substance clearly increases in the services to buildings and landscape sector (N81) likely reflecting to an increased use of cleaning agents to which the substance is a component within this industry. An increasing trend in employment within the specific industry can also be observed (Figure 1) * Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Naphtha (petroleum)-hydro de-sulfurized-light-de-aromatized**
CAS No. (if applicable):	**92045-53-9**
AKA / Synonyms / Sub-Groups:	Naphtha (petroleum), hydrodesulfurized light, dearomatized For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H304, H340,H350; GHS08.
Industries (NACE R2 code) for which the substance is relevant:	Wholesale and retail trade and repair of motor vehicles and motorcycles (G45)
Expert evaluation score(s)*	Wholesale & retail trade & repair of motor vehicles etc: 7 (3,2,2)
Employment characteristics **Total number of employed persons within the EU 28 (2015)**	Wholesale & retail trade & repair of motor vehicles etc: 3,825,269
Trends in employment within industries (2008-2015)	Please see figure 1

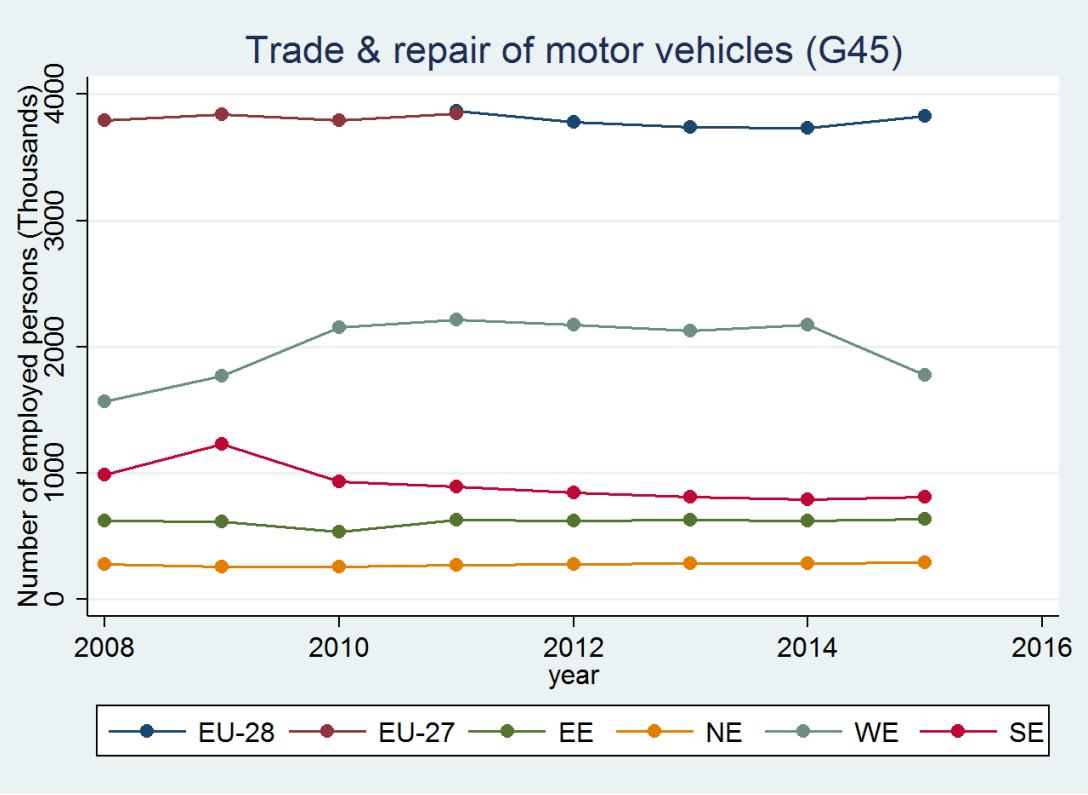

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS).

Production/use characteristics **Trends in amounts used or manufactured:**	Please see figure 2

Level 1 Dangerous Substance Data Summary Sheet

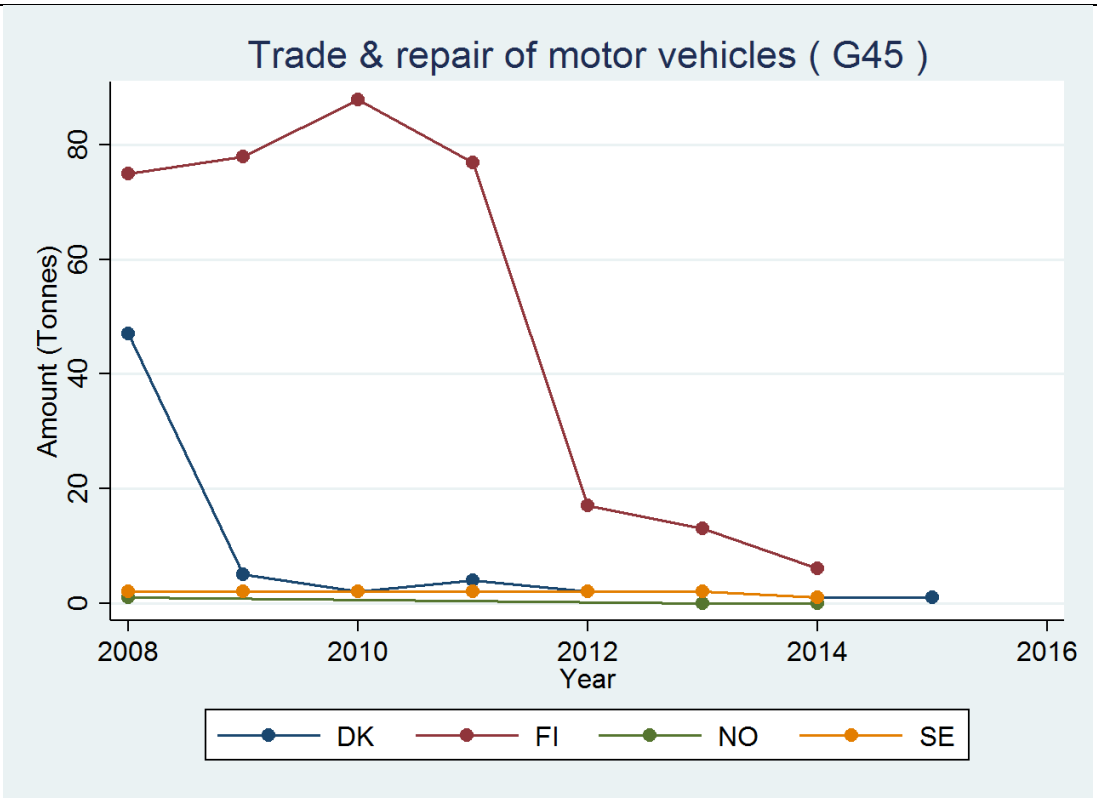

Figure 2 Trends in amounts of Naphtha (petroleum)-hydro de-sulfurized-light-de-aromatized used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Naphtha (petroleum), hydrotreated heavy**
CAS No. (if applicable):	**64742-48-9**
AKA / Synonyms / Sub-Groups:	Hydrotreated Naphtha, hydrotreated heavy, Mineral spirits, Naphta (petroleum), De-aromatised Kerosene . For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H304, H340, H350 GHS08
Industries (NACE R2 code) for which the substance is relevant:	Manufacture (MFR) of coke & refined petroleum products (C19), MFR of chemicals industry (C20), MFR of rubber and plastic products (C22), Wholesale & retail trade & repair of motor vehicles etc (G45), Services to buildings and landscape (N81),
Expert evaluation score(s)*	MFR of coke & refined petroleum products: 6 (1,3,2) MFR of chemicals industry: 6 (2,2,2) MFR of rubber and plastic products: 5 (1,2,2) Wholesale & retail trade & repair of motor vehicles etc: 6 (2,2,2) Services to buildings and landscape: 6 (2,2,2)
Employment characteristics **Total number of employed persons in these industries within the EU 28 (2014/5)**	MFR of coke & refined petroleum products: 111,827 MFR of chemicals industry: 1,100,000 MFR of rubber and plastic products: 1,700,000 Wholesale & retail trade & repair of motor vehicles etc: 3,825,269 Services to buildings and landscape: 4,640,341
Trends in employment within industries (2008-2015)	Please see figures 1 and 2

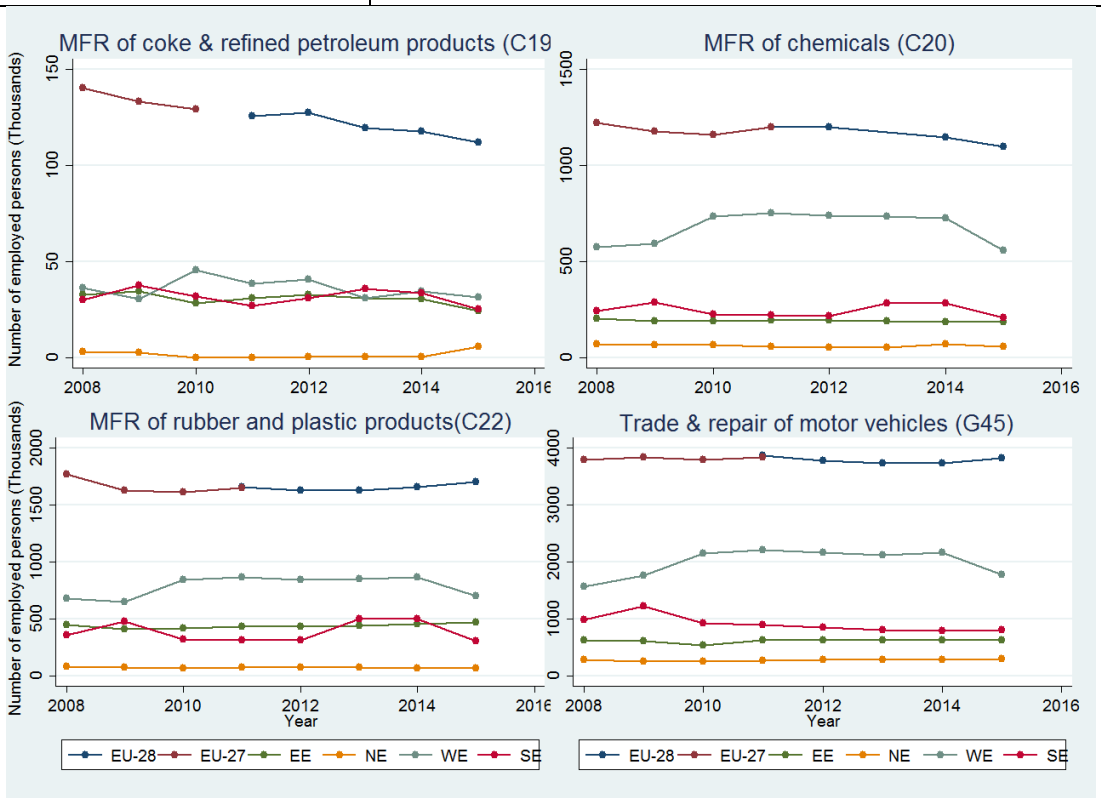

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Level 1 Dangerous Substance Data Summary Sheet

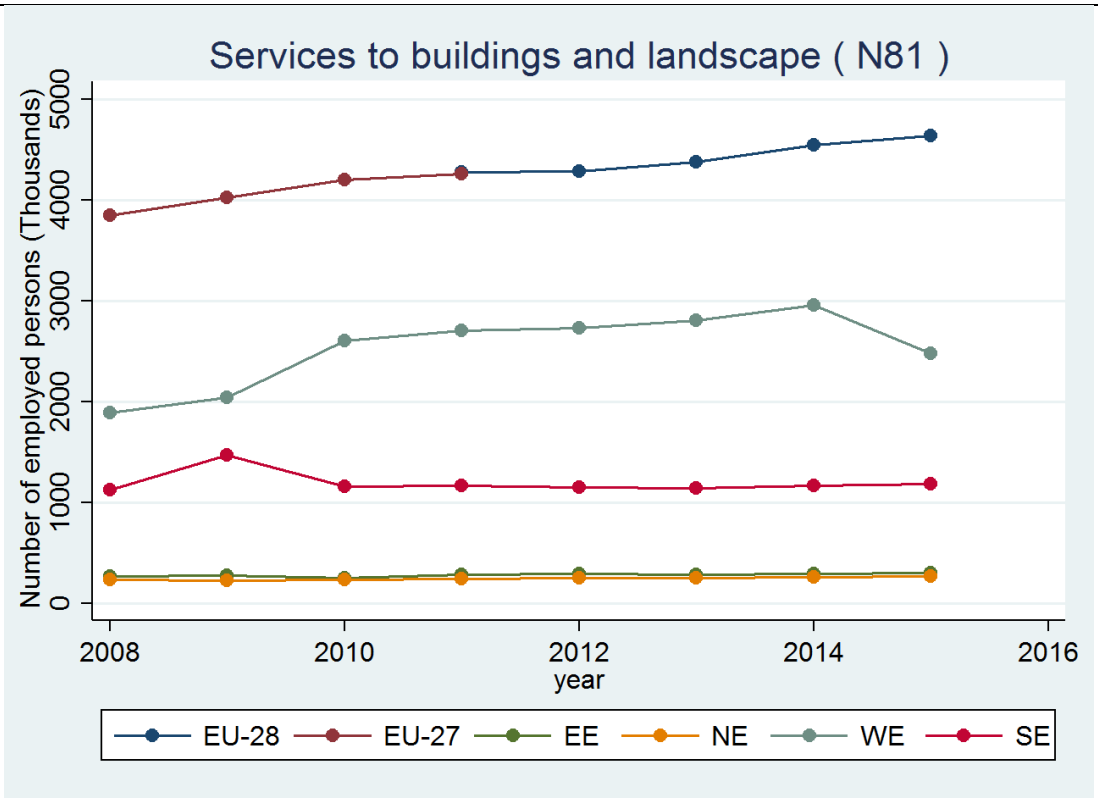

Figure 2 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figures 3 and 4

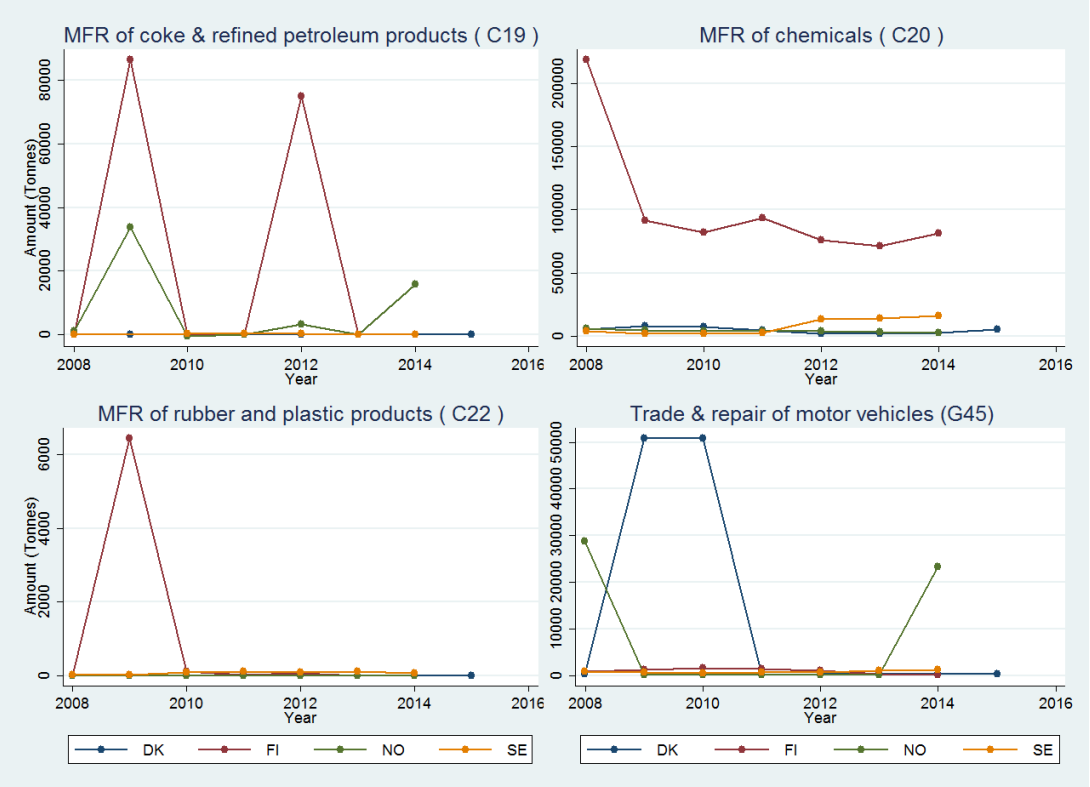

Figure 3 Trends in amounts of Naphtha (petroleum), hydrotreated heavy used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Level 1 Dangerous Substance Data Summary Sheet

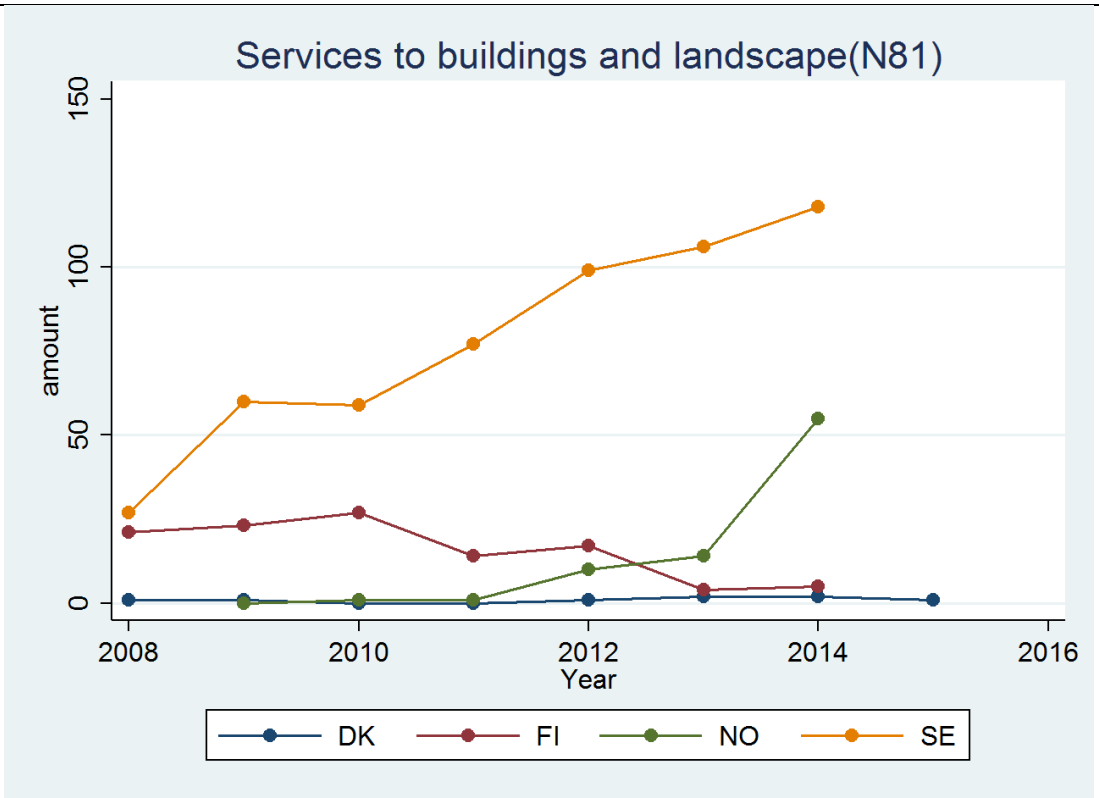

Figure 4 Trends in amounts of Naphtha (petroleum), hydrotreated heavy used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Comments and observations	Use of the substance clearly increases in the services to buildings and landscape sector (N81) likely reflecting to an increased use of cleaning agents to which the substance is a component within this industry. An increasing trend in employment within the specific industry can also be observed (Figure 1) * Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Naphtha (petroleum), hydrotreated light**
CAS No. (if applicable):	**64742-49-0**
AKA / Synonyms / Sub-Groups:	Hydrocarbon, Low boiling point hydrogen treated naphtha, Petroleum ether, Petroleum hydrocarbon solvent. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H304, H340, H350 GHS08
Industries (NACE R2 code) for which the substance is relevant:	Manufacture (MFR) of chemicals (C20), MFR of rubber and plastic products (C22), Wholesale & retail trade & repair of motor vehicles etc (G45)
Expert evaluation score(s)*	MFR of chemicals industry: 6 (2,2,2) MFR of rubber and plastic products: 5 (1,2,2) Wholesale & retail trade & repair of motor vehicles etc: 6 (2,2,2)
Employment characteristics **Total number of employed persons in these industries within the EU 28 (2014/5)** **Trends in employment within industries (2008-2015)**	 MFR of chemicals industry: 1,100,000 MFR of rubber and plastic products: 1,700,000 Wholesale & retail trade & repair of motor vehicles etc: 3,825,269 Please see figure 1

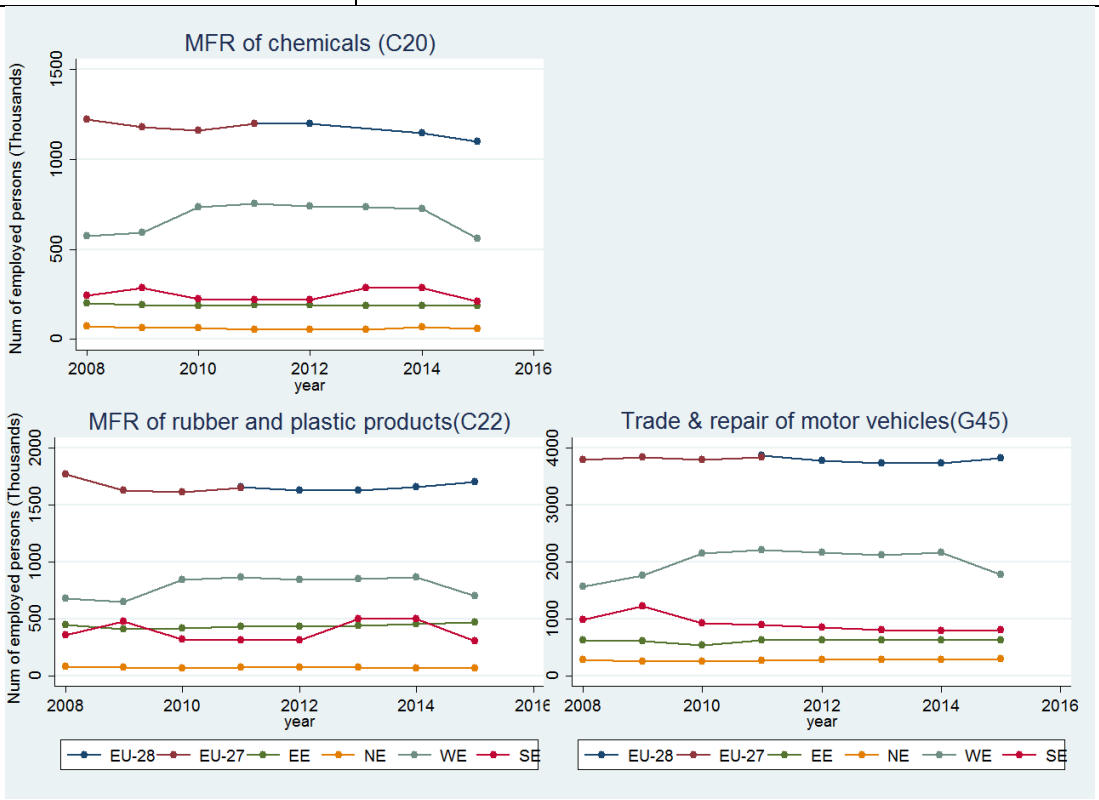

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics **Trends in amounts used or manufactured:**	 Please see figure 2

Level 1 Dangerous Substance Data Summary Sheet

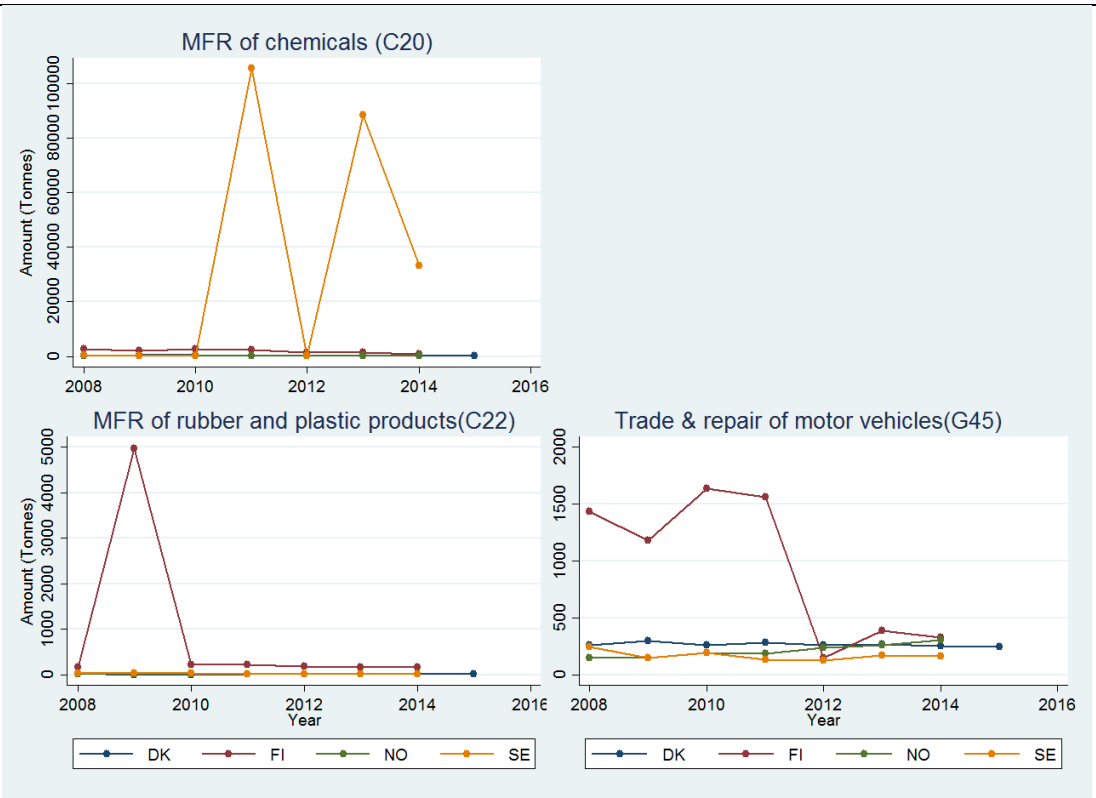

Figure 2 Trends in amounts of Naphtha (petroleum), hydrotreated light used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Naphthalene**
CAS No. (if applicable):	**91-20-3**
AKA / Synonyms / Sub-Groups:	Bicyclo[4.4.0]deca-1,3,5,7,9-pentene, Naphthalin, Napthalene. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H302, H351, H400, H410 GHS07, GHS08, GHS09
Industries (NACE R2 code) for which the substance is relevant:	Manufacture (MFR) of coke & refined petroleum products (C19), MFR of chemicals industry (C20)
Expert evaluation score(s)*	MFR of coke & refined petroleum products: 6 (1,3,2) MFR of chemicals industry: 5 (1,1,3)
Employment characteristics	
Total number of employed persons in these industries within the EU 28 (2014/5)	MFR of coke & refined petroleum products: 111,827 MFR of chemicals industry: 1,100,000
Trends in employment within industries (2008-2015)	Please see figure 1

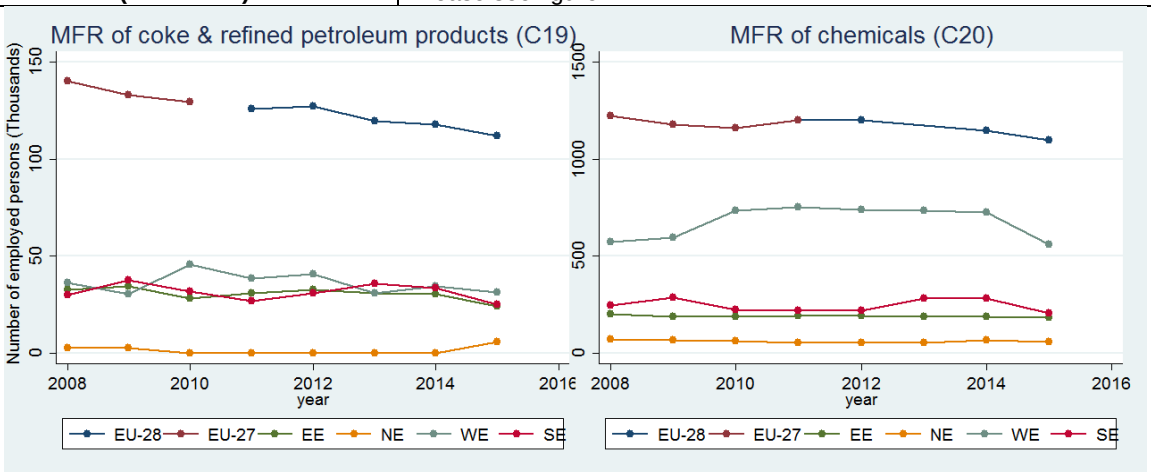

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figure 2 and Table 1

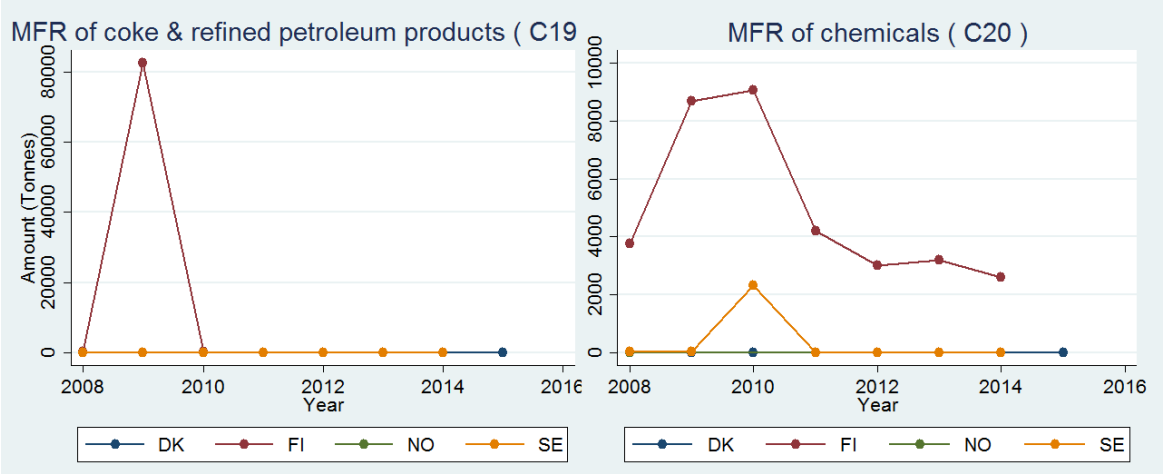

Figure 2 Trends in amounts used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Level 1 Dangerous Substance Data Summary Sheet

Table 1 Trends in total volume (in Tonnes) of Naphthalene produced (2008-2015) within the manufacturing of chemicals industry (C20) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 20147340.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	3,977,116	4,410,978	4,019,958	3,789,832	4,133,306	3,798,443	4,395,609	4,036,234	32,561,479
EU27	3,977,116	4,410,978	4,019,958	3,789,832	4,133,306	3,798,443	4,395,609	4,036,234	32,561,479
BE	130,419	C	C	C	C	184,311	635,482	599,013	1,549,227
DE	1,288,950	1,117,589	1,347,152	1,135,975	974,963	968,653	972,706	970,441	8,776,429
EE	6,609	0	0	0	2,974	0	0	0	9,584
FI	0.02	0.01	0.03	0.03	0.02	0	0	0	0.115
FR	0	0	C	C	C	C	380,130	344,409	724,540
NL	1,667,274	1,889,525	C	C	1,760,874	1,645,469	1,380,920	1,269,432	9,613,494
PT	479,252	428,585	437,194	465,864	384,965	481,922	439,571	381,179	349,853

BE=Belgium, DE=Germany, EE=Estonia, FI=Finland, FR=France, NL=Netherlands, PT=Portugal. C= Confidential.

Note: The manufacturing chemical industries of Bosnia Herzegovina, Cyprus, Greece, Croatia, Hungary, Ireland, Iceland, Lithuania, Luxembourg, Latvia, Malta, Montenegro, Former Yugoslav Republic of Macedonia (FYROM), Norway, Romania, Serbia, and Slovenia do not appear to have produced any Naphthalene during the period 2008-2015. Austria, Bulgaria, Czech Republic, Denmark, Spain, Italy, Poland, Sweden, Slovakia, Turkey and the United Kingdom appear to have produced Naphthalene within part of this period but the amounts have been confidential to the database.

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Nickel**
CAS No. (if applicable):	**7440-02-0**
AKA / Synonyms / Sub-Groups:	Ni metal, Ni, Niccol, nichel. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H317, H351, H372, H412 GHS07, GHS08
Industries (NACE R2 code) for which the substance is relevant:	Manufacture of basic metals (C24)
Expert evaluation score(s)*	Manufacture of basic metals: 8 (2,2,2)
Employment characteristics	
Total number of employed persons within the EU 28 (2015)	Manufacture of basic metals: 960,270
Trends in employment within industries (2008-2015)	Please see figure 1

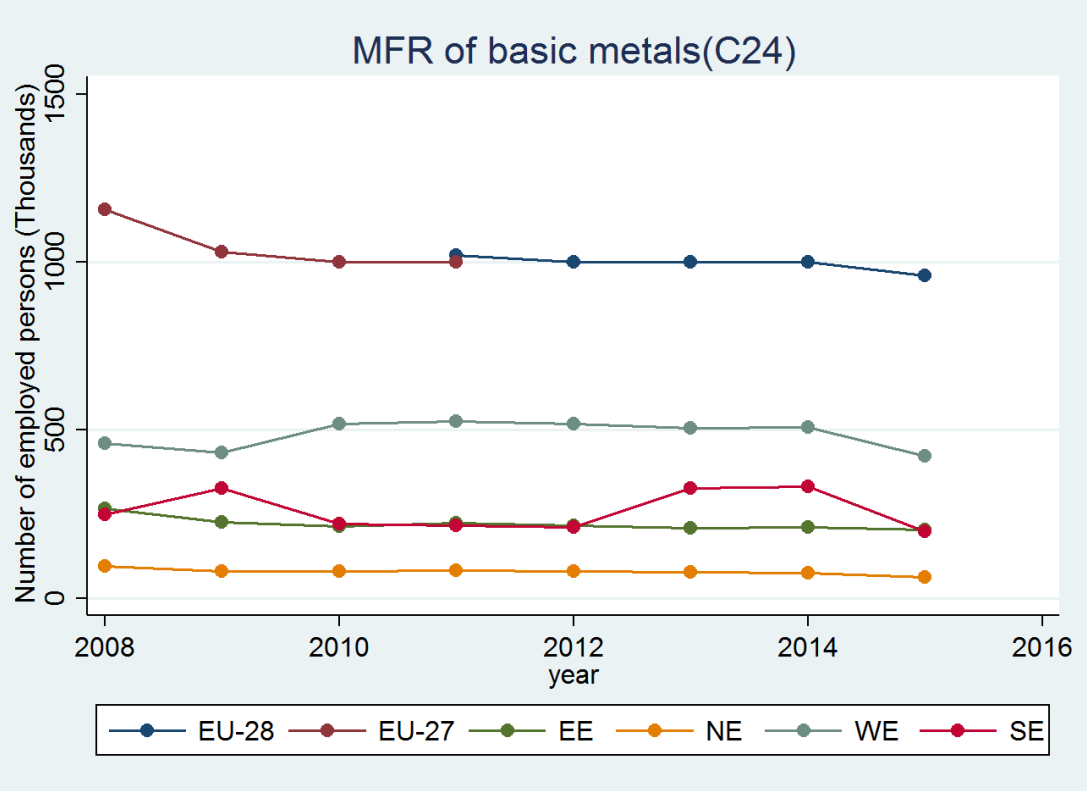

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS).

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figure 2 and Table 1 and 2

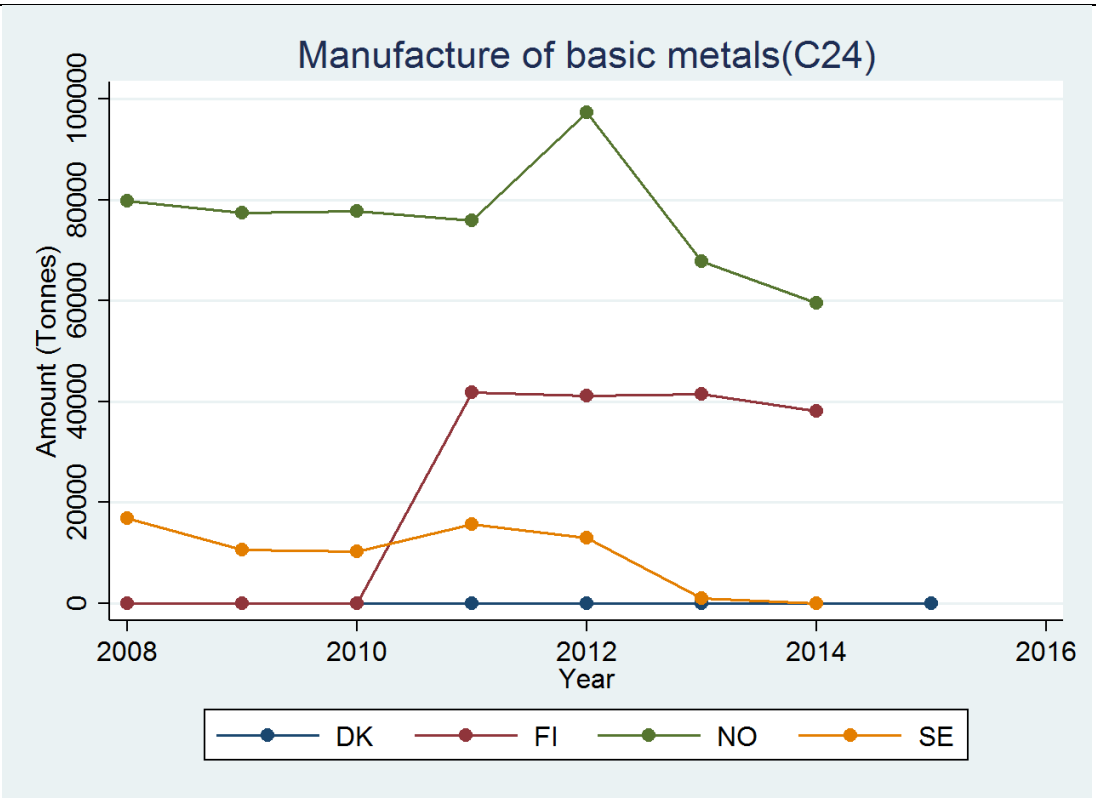

Figure 2 Trends in amounts of Nickel used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

The PRODCOM database provides different figures on total volumes of production within the basic metals industry depending on the type of Nickel involved. Below the relevant entries for Nickel powders and flakes as well as for unwrought Nickels are shown.

Table 1 Trends in total volume (in Tonnes) of Nickel powders and flakes (excluding nickel oxide sinters) produced (2008-2015) within the manufacture of basic metals industry (C24) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 24452100.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	8,055	5,527	8,000	10,000	2,812	2,836	2,644	2,499	42,376
EU27	8,055	5,527	8,000	10,000	2,812	2,836	2,644	2,499	42,376
FI	136	49	169	276	185	349	97	236	1497
SK	0	0	0	0	0	C	C	1	1

FI=Finland, SK=Slovakia, C=Confidential.
Note: The manufacturing chemical industries of Austria, Bosnia Herzegovina, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Greece, Croatia, Hungary, Iceland, Italy, Lithuania, Luxembourg, Latvia, Malta, Montenegro, The Former Yugoslav and Republic of Macedonia (FYROM), Netherlands, Norway, Poland, Portugal, Romania, Serbia, and Turkey do not appear to have produced any Nickel powders and flakes during the period 2008-2015. Belgium, Germany, Ireland, France, Spain, Sweden, Slovenia, and the United Kingdom appear to have produced Nickel powders and flakes within part of this period but the amounts have been confidential to the database.

Table 2 Trends in total volume (in Tonnes) of Nickel, produced (2008-2015) within the manufacture of basic metals industry (C24) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 24451100.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	147,097	103,236	130,282	155,904	111,621	107,384	104,258	101,753	961,539
EU27	147,097	103,236	130,282	155,904	111,621	107,384	104,258	101,753	961,539
FI	44,303	36,052	41,317	43,840	39,374	39,511	36,559	36,590	317,546
IT	62	C	C	C	C	0	0	0	62
UK	49,124	27,156	31,252	47,806	11,001	12,353	13,087	10,664	202,443

FI=Finland, IT=Italy, UK=United Kingdom, C= Confidential.
Note: The manufacturing of basic metals industries of Austria, Bosnia Herzegovina, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Spain, Greece, Croatia, Hungary, Ireland, Iceland, Lithuania, Luxembourg, Malta, Montenegro, The Former Yugoslav and Republic of Macedonia (FYROM), Netherlands, Romania, Slovakia, and Serbia do not appear to have produced any Nickel, unwrought during the period 2008-2015. Belgium, Germany, France, Norway, Latvia, Poland, Portugal, Sweden, Slovenia, and Turkey appear to have produced Nickel, unwrought within part of this period but the amounts have been confidential to the database.

Level 1 Dangerous Substance Data Summary Sheet

Comments and observations	SPIN and PRODCOM data suggest a decrease in amounts of both manufactured and used nickel within the manufacturing of basic metals industry. A overall declining trend in employment can also be observed. * Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Nitric acid**
CAS No. (if applicable):	**7697-37-2**
AKA / Synonyms / Sub-Groups:	hydrogen trioxonitrate(1−), Nitric Acid (67%). For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H272, H314 GHS03, GHS05
Industries (NACE R2 code) for which the substance is relevant:	Forestry and logging (A02), Manufacture (MFR) of chemicals industry (C20), MFR of basic metals (C24), MFR of fabricated metal products (C25)
Expert evaluation score(s)*	Forestry and logging: 4 (1,1,2) MFR of chemicals industry: 5 (1,1,3) MFR of basic metals: 6 (1,2,3) MFR of fabricated metal products: 6 (1,2,3)
Employment characteristics **Total number of employed persons in these industries within the EU 28 (2014/5)** **Trends in employment within industries (2008-2015)**	 Forestry and logging: 537,000 MFR of chemicals industry: 1,100,000 MFR of basic metals: 960,270 MFR of fabricated metal products: 3,663,178 Please see figure 1

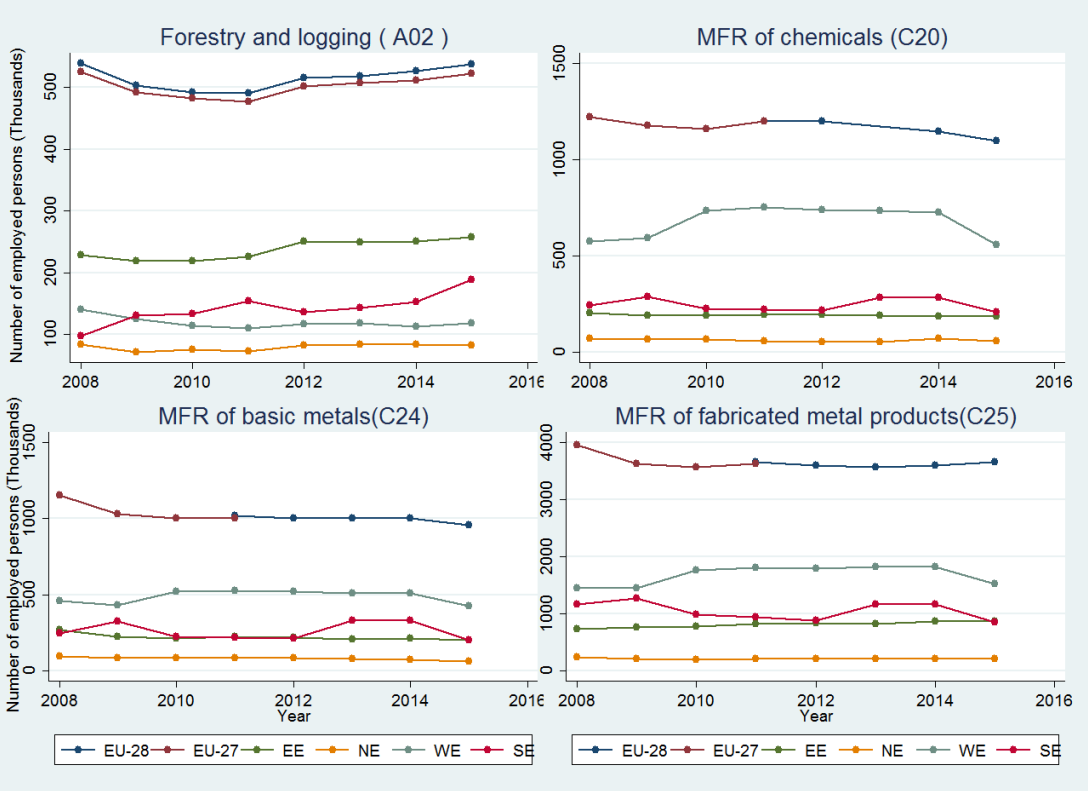

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) and Joint Forest Sector Questionnaire (JFSQ) databases.

Production/use characteristics **Trends in amounts used or manufactured:**	 Please see figure 2 and Table 1

Level 1 Dangerous Substance Data Summary Sheet

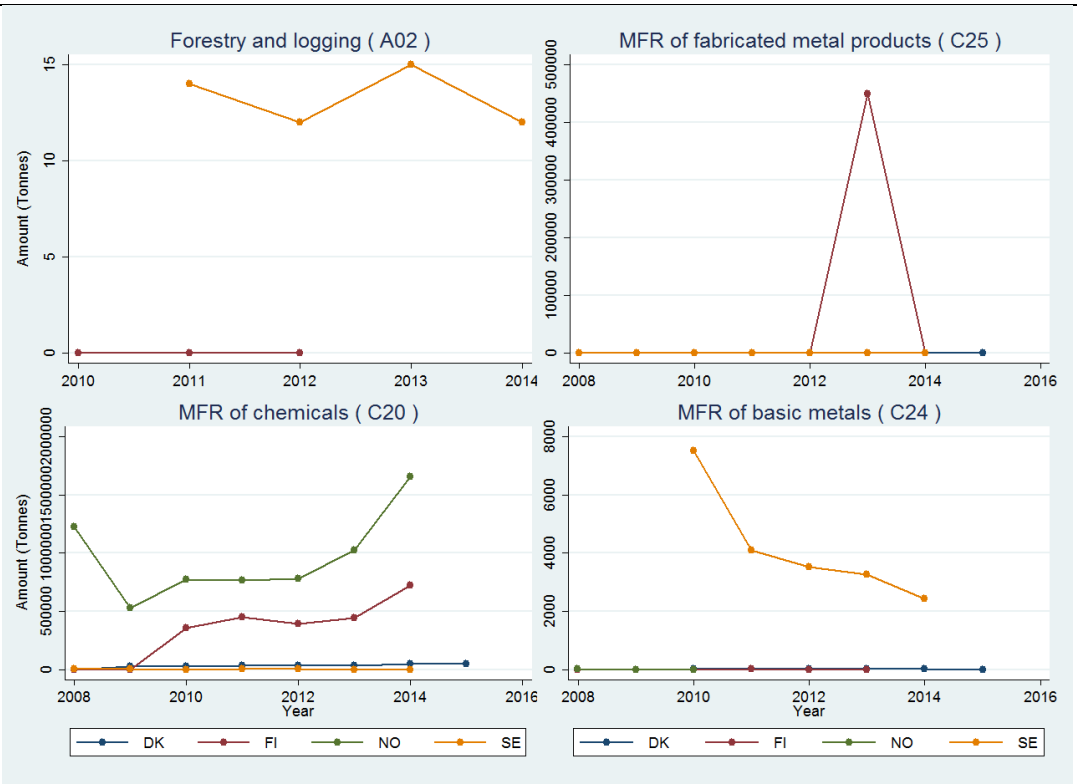

Figure 2 Trends in amounts of Nitric acid used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Table 1 Trends in total volume (in Tonnes) of Nitric acid produced (2008-2015) within the manufacturing of chemicals industry (C20) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 20151050.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	6,250,382	5,936 ,201	7,640,923	6,512,660	7,554,840	7,269,801	6,839,645	6,485,305	54,489,760
EU27	6,072,013	587,815	7,566,828	6,439,463	7,491,434	7,204,341	6,772,040	6,409,485	53,833,760
BE	C	C	C	C	299,277	404,628	486,500	487,173	167,757
CZ	124,588	122,573	111,680	134,791	128,228	123,644	131,752	130,535	1,007,791
DE	1,669,054	1,821,074	2,529,352	1,697,870	2,518,651	2,498,424	1,726,694	1,735,210	16,196,329
ES	375,584	407,642	160,767	190,023	188,184	115,710	103,225	147,115	1,688,250
FI	107,100	77,176	233,824	228,242	241,672	253,832	255,568	251,325	1,648,741
FR	73305	559,772	1,007,737	778,527	785,680	833,199	767,962	560,577	5,366,759
HR	178,369	58,048	74,095	73,197	63,406	65,460	67,605	75,820	65,6000
IT	115,388	110,389	151,063	113,834	112,367	91,862	96,549	38,894	830,346
LT	233,110	205,137	210,843	265,437	269,006	230,817	250,904	263,033	1,928,291
NL	C	C	C	C	C	C	303,133	C	303,133
PL	525,594	497,563	514,142	502,557	537,213	516,230	535,447	543,156	4,171,902
PT	280,247	179,142	545,116	C	435,914	C	C	C	1,440,419
RO	327,629	158,603	233,778	239,494	211,704	204,575	366,421	185,611	1,927,818
UK	293,983	C	C	C	C	C	246,507	C	54,0491

BE=Belgium, CZ=Czech Republic, DE=Germany, ES=Spain, FI=Finland, FR=France, HR=Croatia, IT=Italy, LT=Lithuania, NL=Netherlands, PL=Poland, PT=Portugal, RO=Romania, UK=United Kingdom, C= confidential.
Note: The manufacturing chemical industries of Bosnia Herzegovina, Cyprus, Estonia, Iceland, Luxembourg, Latvia, Malta, Montenegro, The Former Yugoslav Republic of Macedonia (FYROM), and Slovakia do not appear to have produced any Nitric acid during the period 2008-2015. Austria, Bulgaria, Denmark, Greece, Hungary, Ireland, Norway, Serbia, Sweden, Slovakia and Turkey appear to have produced Nitric acid within part of this period but the amounts have been confidential to the database.

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Propane-1,2-diol**
CAS No. (if applicable):	**57-55-6**
AKA / Synonyms / Sub-Groups:	1,2 propylene glycol, Mono propylene glycol, Propane-1,2-diol, propylene glycol. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H302, H315, H317, H319, H335, H336, H410, H411 GHS07, GHS08, GHS09
Industries (NACE R2 code) for which the substance is relevant:	Wholesale & retail trade & repair of motor vehicles etc (G45), Services to buildings and landscape (N81)
Expert evaluation score(s)*	Wholesale & retail trade & repair of motor vehicles etc: 6 (3,2,1) Services to buildings and landscape: 4 (1,2,1)
Employment characteristics **Total number of employed persons in these industries within the EU 28 (2014/5)**	Wholesale & retail trade & repair of motor vehicles etc: 3,825,269 Services to buildings and landscape: 4,640,341
Trends in employment within industries (2008-2015)	Please see figure 1

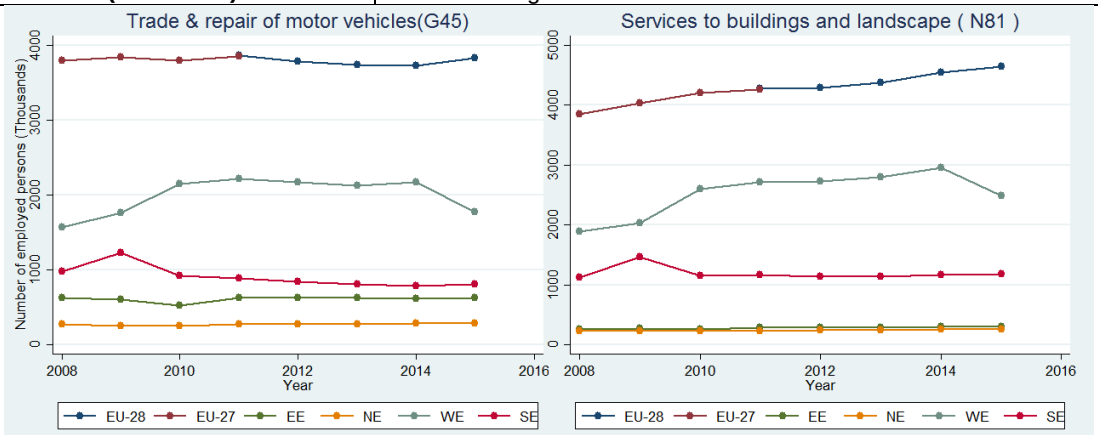

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics **Trends in amounts used or manufactured:**	Please see figure 2

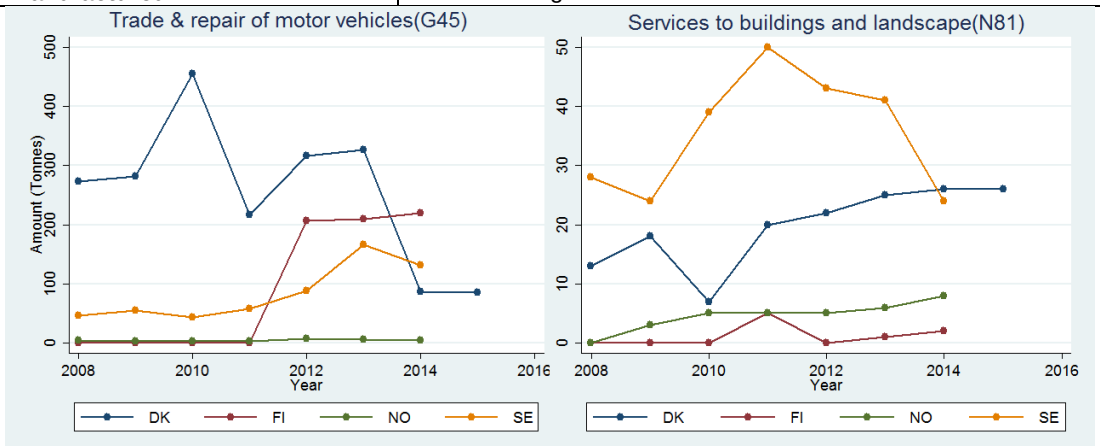

Figure 3 Trends in amounts of Propane-1,2-diol used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides**
CAS No. (if applicable):	**68424-85-1**
AKA / Synonyms / Sub-Groups:	Alkyl dimethyl benzyl ammonium chloride; benzyl-C12-16-alkyldimethyl chlorides. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H226 ,H290, H301, H302, H311, H312, H314, H315, H318, H319, H330, H331,H350,H400,H410 GHS02, GHS05, GHS06, GHS07, GHS08, GHS09
Industries (NACE R2 code) for which the substance is relevant:	Services to buildings and landscape activities (N81)
Expert evaluation score(s)*	Services to buildings and landscape activities: 7 (3,2,2)
Employment characteristics	
Total number of employed persons within the EU 28 (2015)	Services to buildings and landscape activities: 4,640,341
Trends in employment within industries (2008-2015)	Please see figure 1

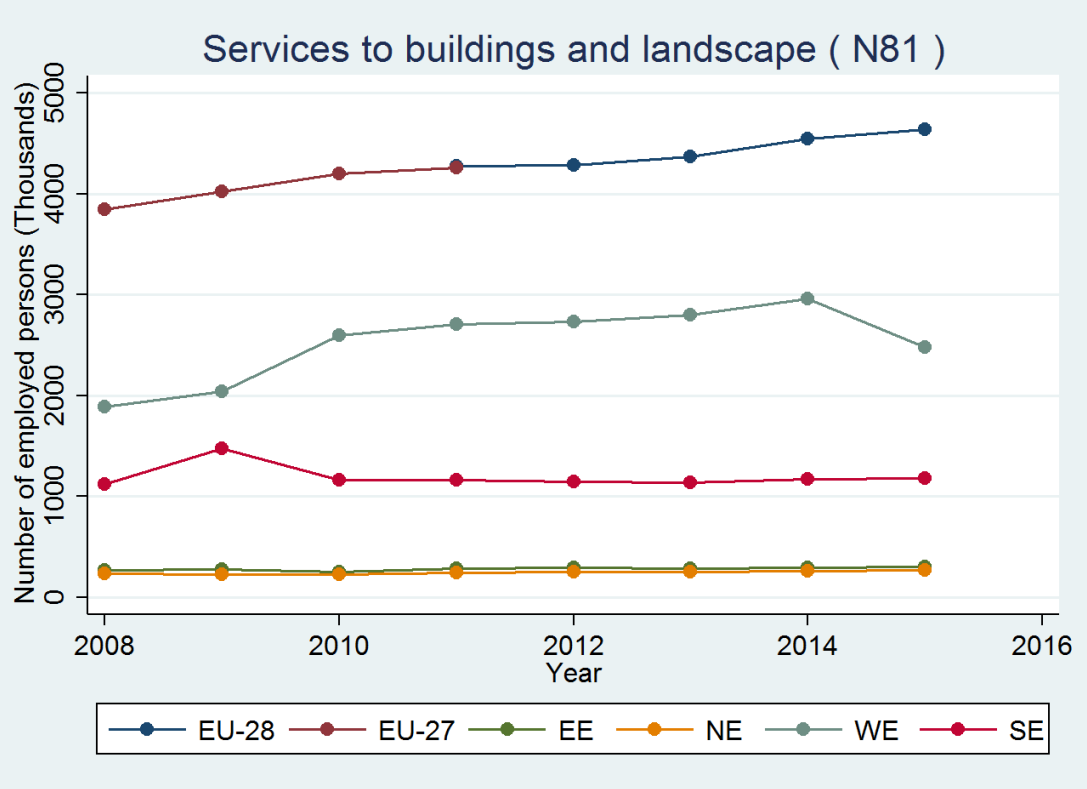

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS).

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figure 2

Level 1 Dangerous Substance Data Summary Sheet

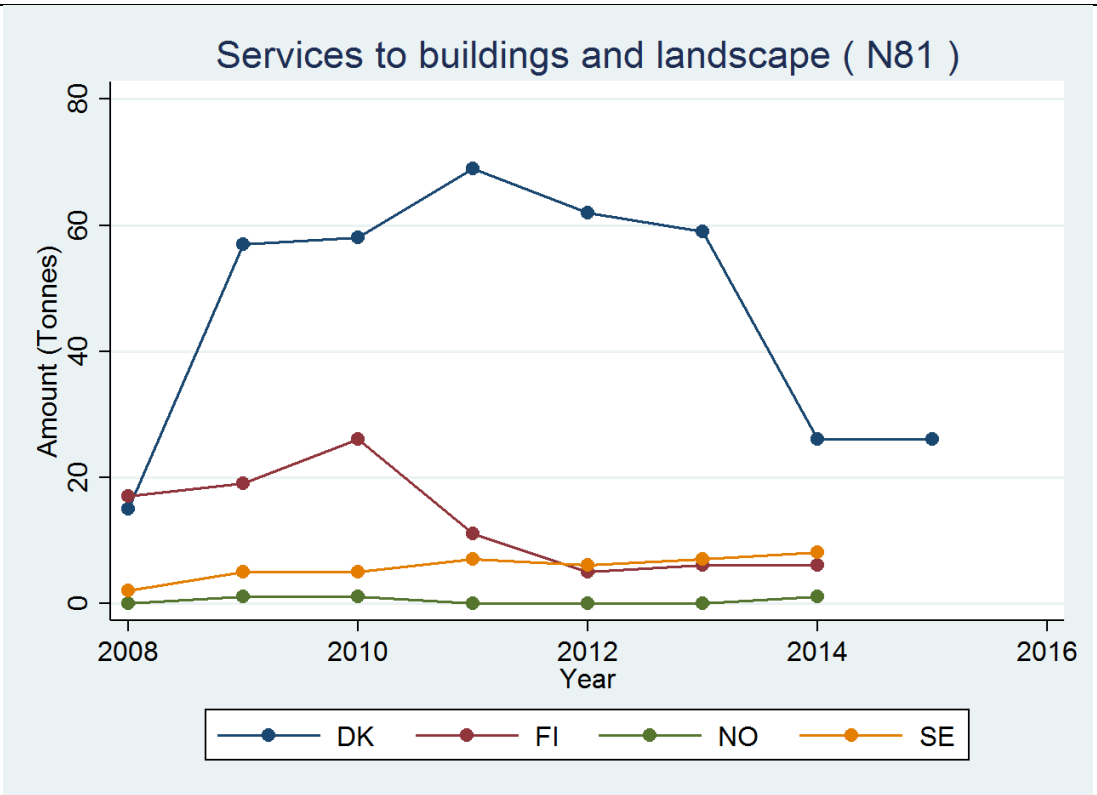

Figure 2 Trends in amounts of Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Residual Oils (petroleum)-solvent-dewaxed**
CAS No. (if applicable):	**64742-62-7**
AKA / Synonyms / Sub-Groups:	Residual oils (petroleum), solvent-dewaxed For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H350; GHS08
Industries (NACE R2 code) for which the substance is relevant:	Wholesale and retail trade and repair of motor vehicles and motorcycles (G45)
Expert evaluation score(s)*	Wholesale & retail trade & repair of motor vehicles etc: 6 (2,2,2)
Employment characteristics	
Total number of employed persons within the EU 28 (2015)	Wholesale & retail trade & repair of motor vehicles etc: 3,825,269
Trends in employment within industries (2008-2015)	Please see figure 1

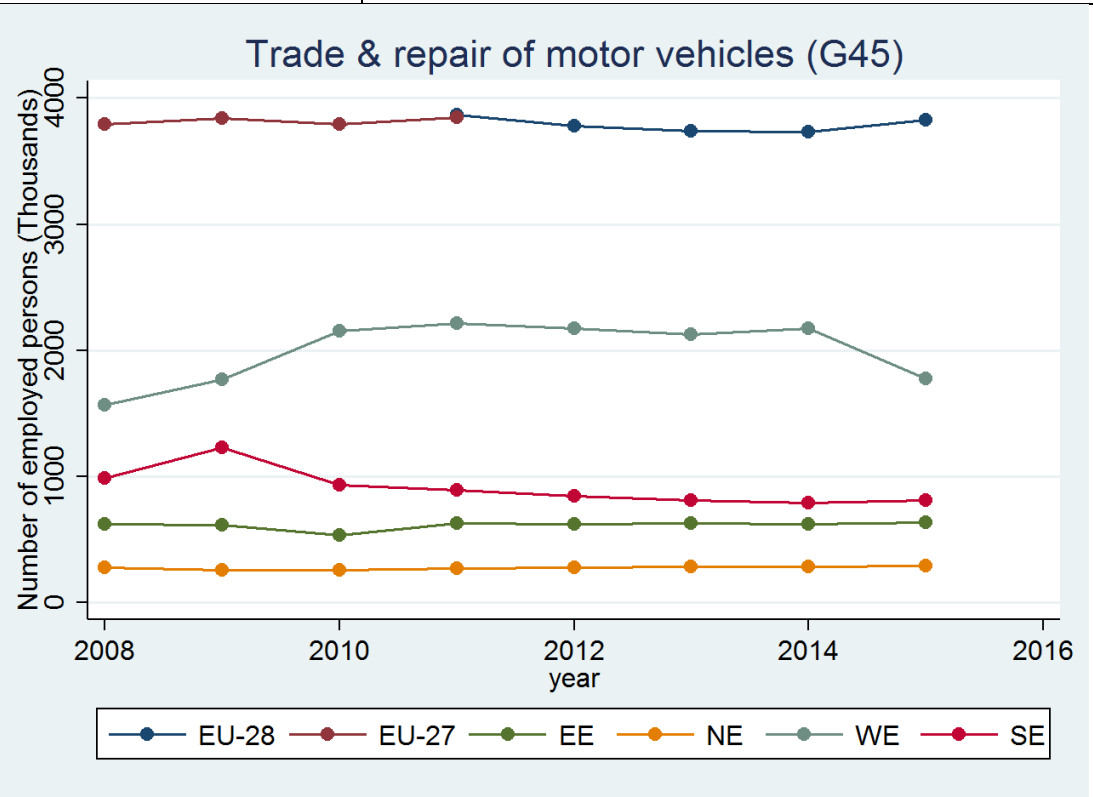

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS).

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figure 2

Level 1 Dangerous Substance Data Summary Sheet

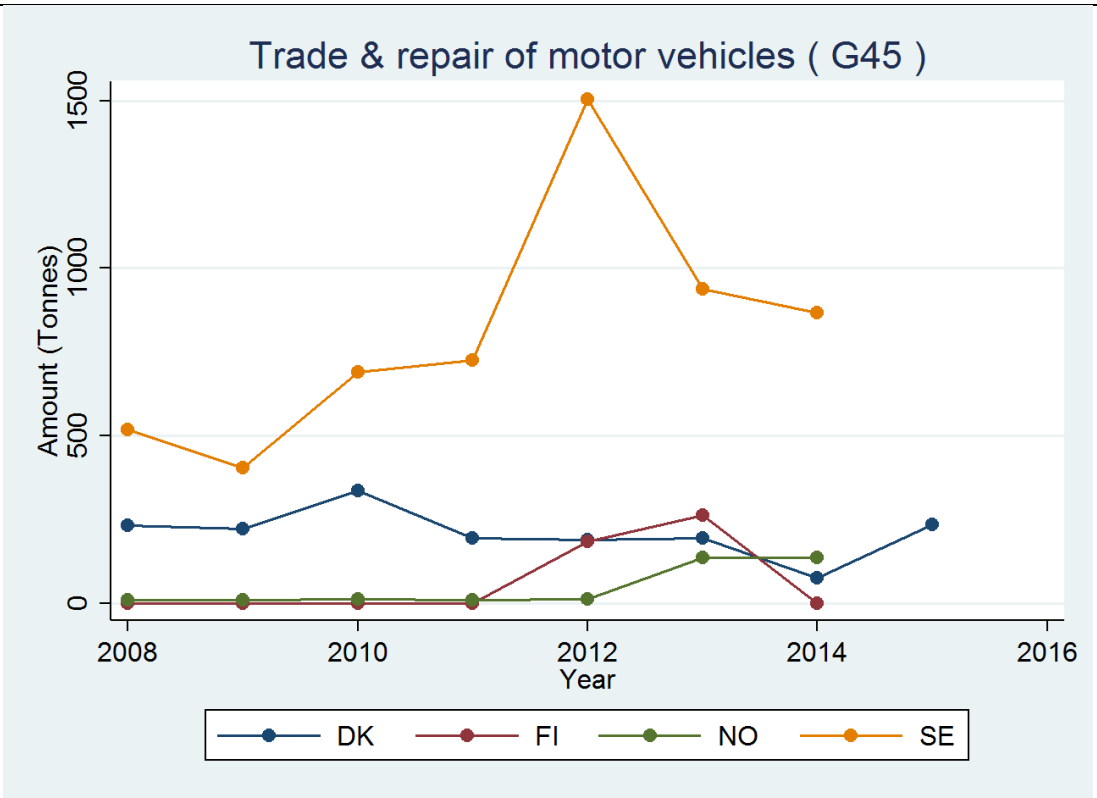

Figure 2 Trends in amounts of Residual Oils (petroleum)-solvent-dewaxed used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Solvent naphtha (petroleum), heavy arom.**
CAS No. (if applicable):	**64742-94-5**
AKA / Synonyms / Sub-Groups:	aromatic hydrocarbons C9-C12, aromatic naphta solvent, Heavy aromatic solvent naphtha (Petroleum), solvant naphta lourds, Solvent naphtha (petroleum). For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H304 GHS08
Industries (NACE R2 code) for which the substance is relevant:	Manufacture (MFR) of coke & refined petroleum products (C19), MFR of chemicals (C20), Wholesale & retail trade & repair of motor vehicles etc (G45), Water transport (H50)
Expert evaluation score(s)*	MFR of coke & refined petroleum products: 6 (1,3,2) MFR of chemicals: 6 (2,2,2) Wholesale & retail trade & repair of motor vehicles etc: 6 (2,2,2) Water transport: 5 (1,2,2)
Employment characteristics **Total number of employed persons in these industries within the EU 28 (2014/5)** **Trends in employment within industries (2008-2015)**	 MFR of coke & refined petroleum products: 111,827 MFR of chemicals: 1,100,000 Wholesale & retail trade & repair of motor vehicles etc: 3,825,269 Water transport: 222,721 Please see figure 1

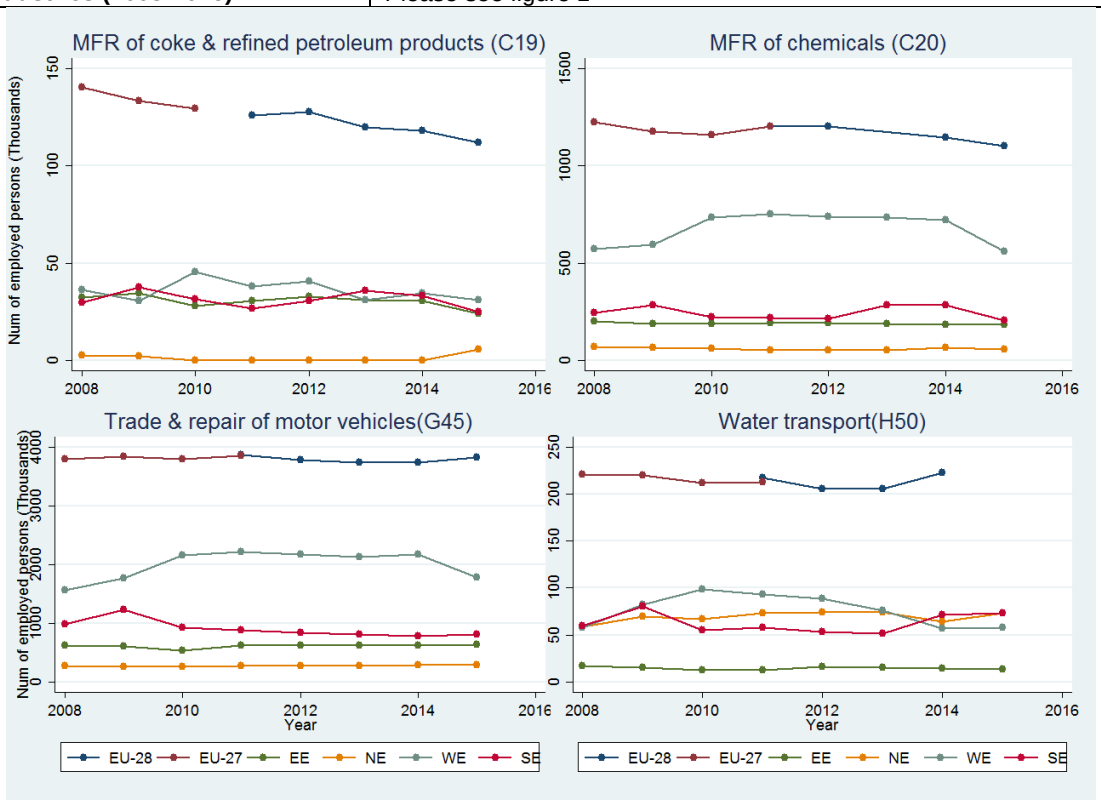

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics **Trends in amounts used or manufactured:**	 Please see figure 2

Level 1 Dangerous Substance Data Summary Sheet

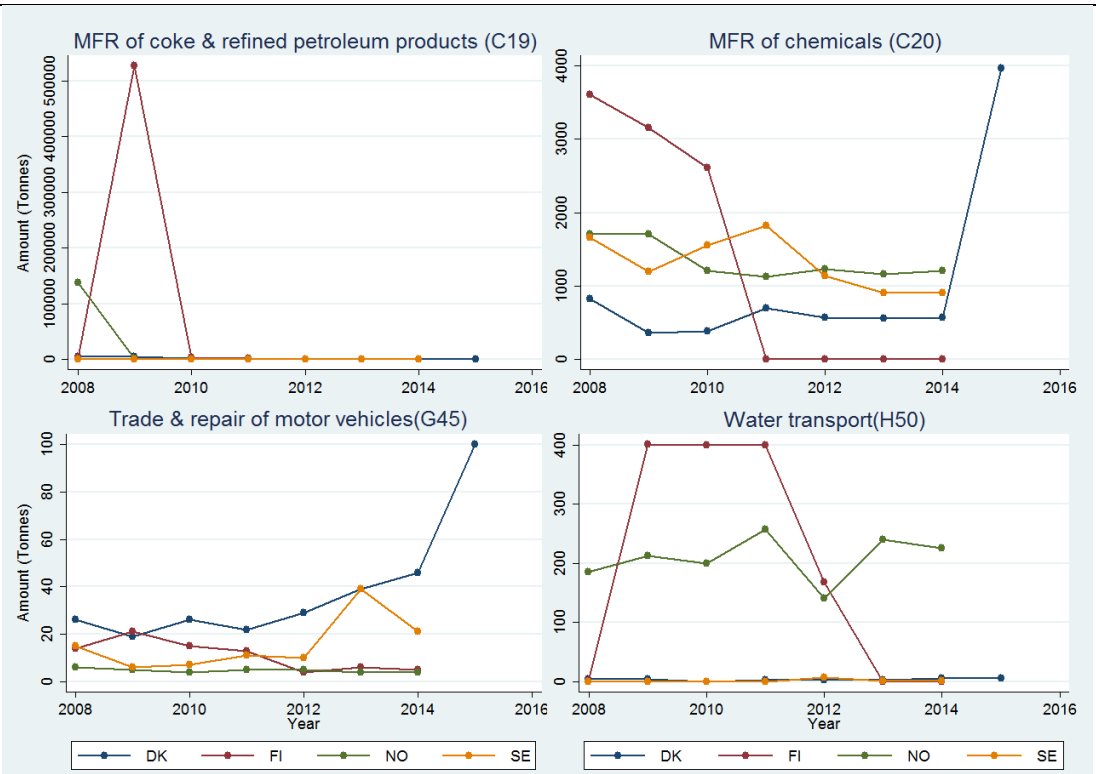

Figure 2 Trends in amounts of Solvent naphtha (petroleum), heavy arom.used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Solvent naphtha (petroleum), light arom.**
CAS No. (if applicable):	**64742-95-6**
AKA / Synonyms / Sub-Groups:	Light aromatic naphtha, low boiling naphtha-unspecified, Solvent Naphtha , Solvent naphtha (petroleum), Petroleum naphtha, light aromatic. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H304, H340, H350 GHS08
Industries (NACE R2 code) for which the substance is relevant:	Manufacture (MFR) of coke & refined petroleum products (C19), MFR of chemicals industry (C20), MFR of rubber and plastic products (C22), MFR of fabricated metal products (C25), MFR of machinery and equipment n.e.c. (C28), MFR of other transport equipment (C30), Repair & installation of machinery & equipment (C33), Wholesale & retail trade & repair of motor vehicles etc (G45)
Expert evaluation score(s)*	MFR of coke & refined petroleum products: 6 (1,3,2) MFR of chemicals industry: 6 (2,2,2) MFR of rubber and plastic products: 5 (1,2,2) MFR of fabricated metal products: 7 (2,2,3) MFR of machinery and equipment n.e.c: 7 (2,2,3) MFR of other transport equipment: 6 (1,2,3) Repair & installation of machinery & equipment: 7 (2,2,3) Wholesale & retail trade & repair of motor vehicles etc: 6 (2,2,2)
Employment characteristics **Total number of employed persons in these industries within the EU 28 (2014/5)** **Trends in employment within industries (2008-2015)**	 MFR of coke & refined petroleum products: 111,827 MFR of chemicals industry: 1,100,000 MFR of rubber and plastic products: 1,700,000 MFR of fabricated metal products: 3,663,178 MFR of machinery and equipment n.e.c: 2,940,000 MFR of other transport equipment: 738,012 Repair & installation of machinery & equipment: 1,265,082 Wholesale & retail trade & repair of motor vehicles etc: 3,825,269 Please see figures 1 and 2

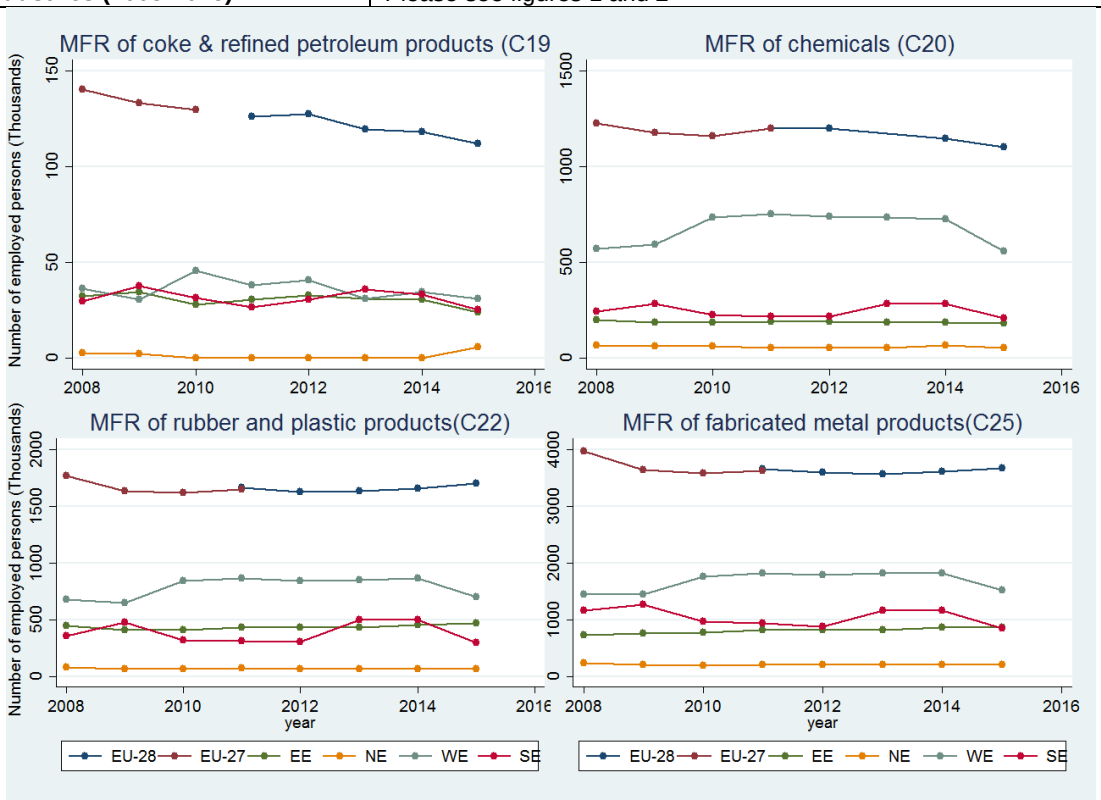

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Level 1 Dangerous Substance Data Summary Sheet

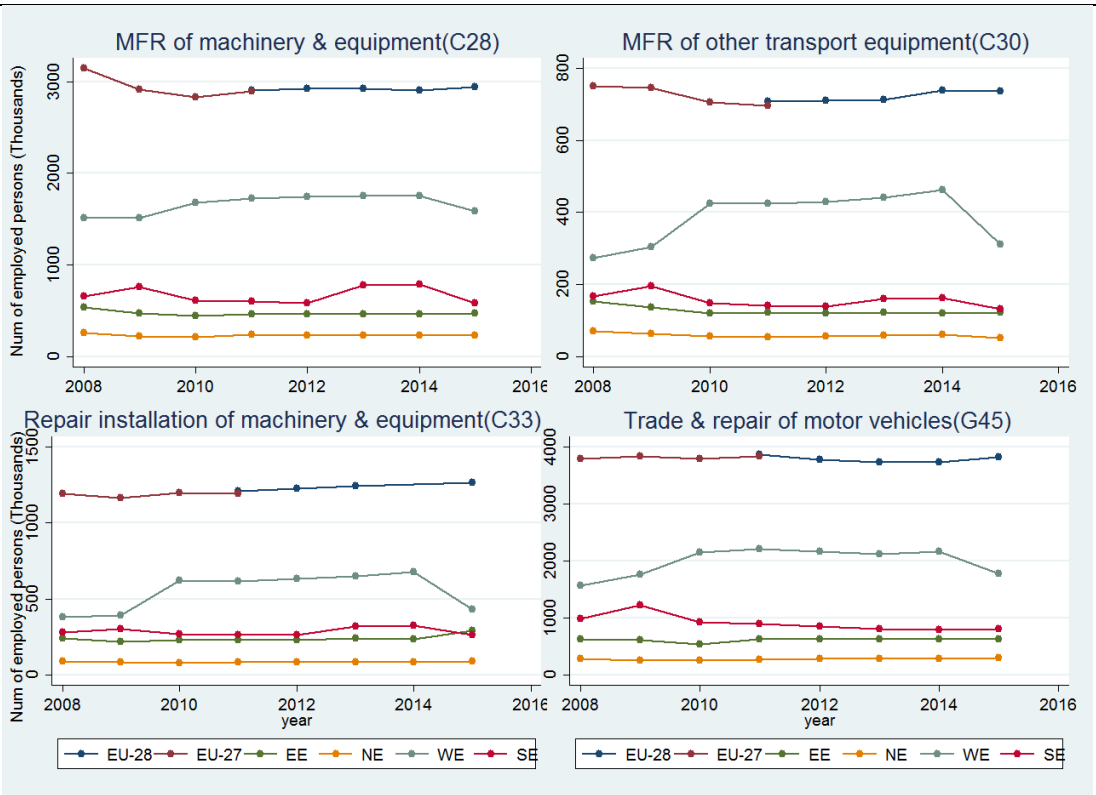

Figure 2 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figures 3 and 4

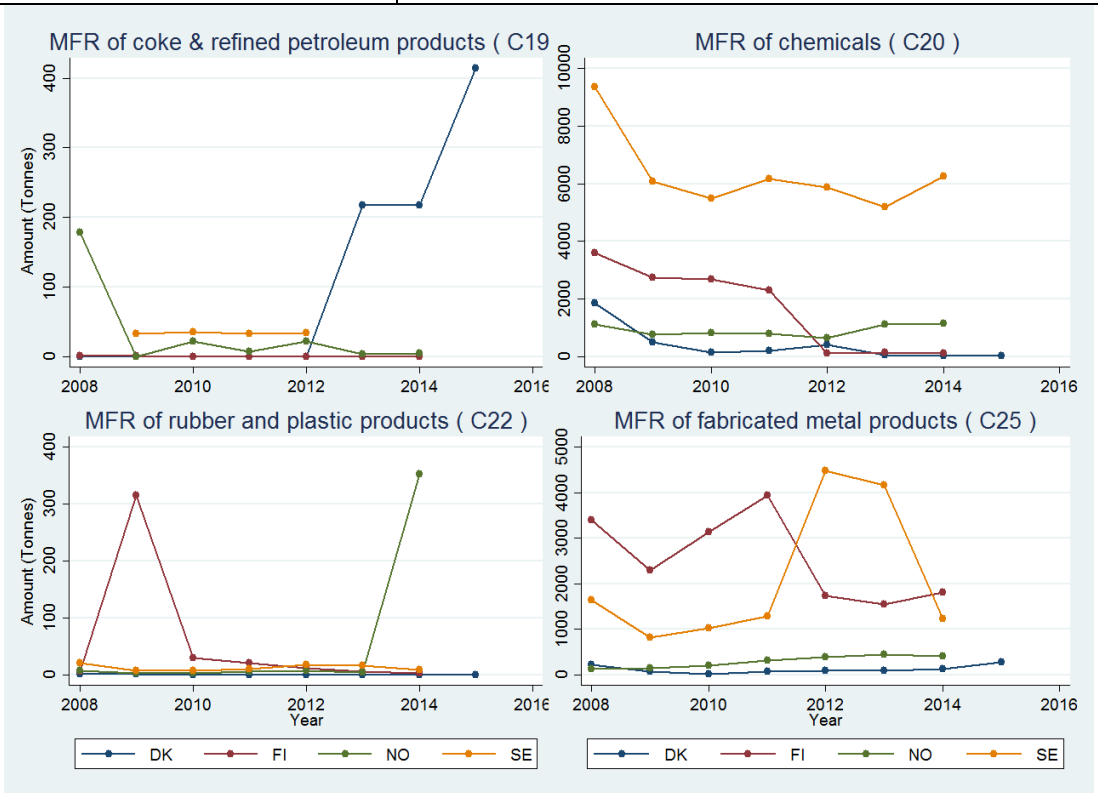

Figure 3 Trends in amounts of Solvent naphtha (petroleum), light arom. used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Level 1 Dangerous Substance Data Summary Sheet

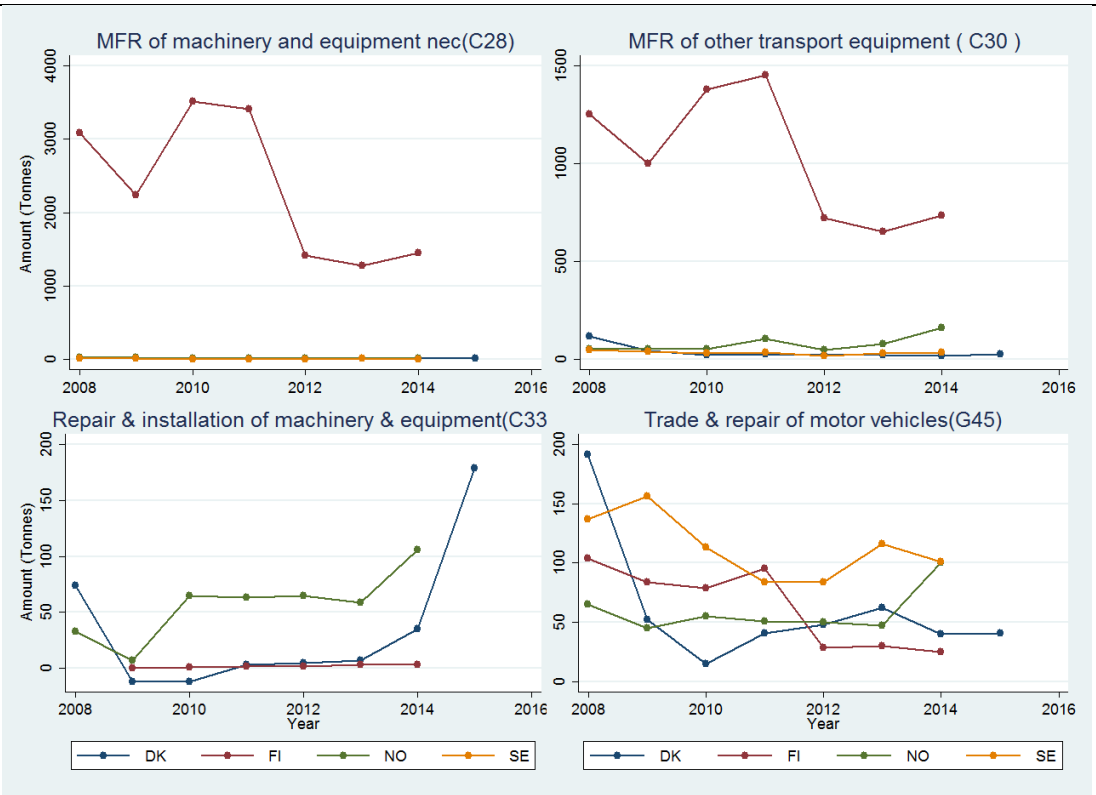

Figure 4 Trends in amounts of Solvent naphtha (petroleum), light arom. used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Comments and observations	*Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Solvent naphtha (petroleum), medium aliph.**
CAS No. (if applicable):	**64742-88-7**
AKA / Synonyms / Sub-Groups:	Aliphatic hydrocarbon; Aliphatic petroleum distillates; Straight run kerosene, White Spirit. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H304, H372 GHS08
Industries (NACE R2 code) for which the substance is relevant:	Manufacture (MFR) of chemicals (C20), Wholesale & retail trade & repair of motor vehicles & motorcycles (G45)
Expert evaluation score(s)*	Manufacture (MFR) of chemicals: 6 (2,2,2) Wholesale & retail trade & repair of motor vehicles: 6 (2,2,2)
Employment characteristics	
Total number of employed persons in these industries within the EU 28 (2014/5)	MFR of chemicals: 1,100,000 Wholesale & retail trade & repair of motor vehicles: 3,825,269
Trends in employment within industries (2008-2015)	Please see figure 1

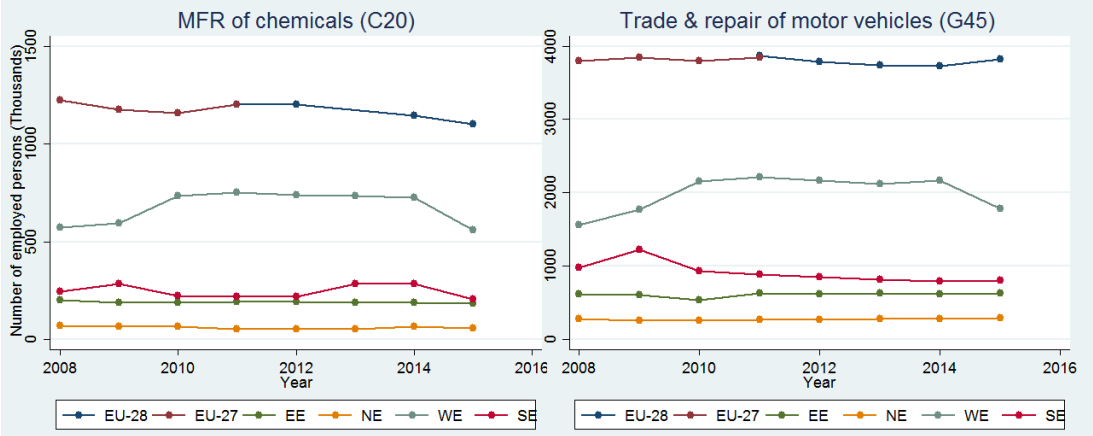

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figure 2

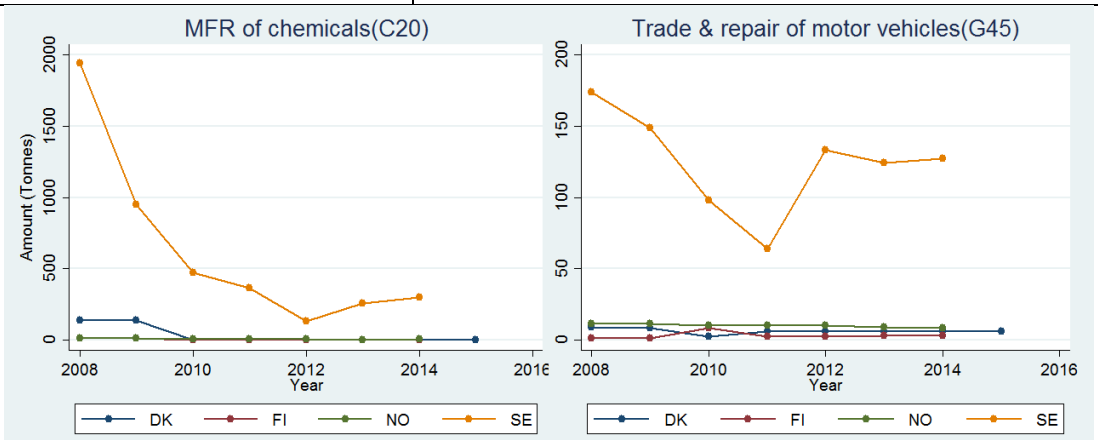

Figure 2 Trends in amounts of Solvent naphtha (petroleum), medium aliph.used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Comments and observations	*Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Stoddard Solvent**
CAS No. (if applicable):	**8052-41-3**
AKA / Synonyms / Sub-Groups:	Stoddard Solvent For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H304, H340, H350, H372; GHS08
Industries (NACE R2 code) for which the substance is relevant:	Wholesale and retail trade and repair of motor vehicles and motorcycles (G45)
Expert evaluation score(s)*	Wholesale & retail trade & repair of motor vehicles etc: 8 (3,3,2)
Employment characteristics	
Total number of employed persons within the EU 28 (2015)	Wholesale & retail trade & repair of motor vehicles etc: 3,825,269
Trends in employment within industries (2008-2015)	Please see figure 1

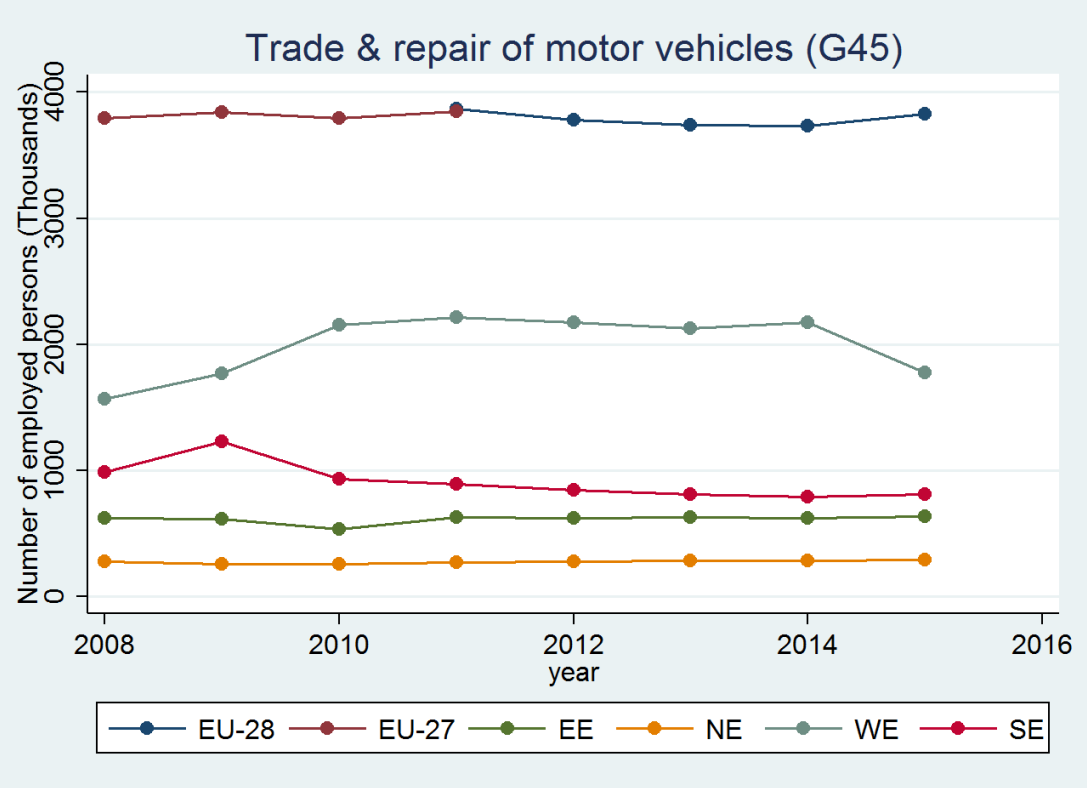

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS).

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figure 2

Level 1 Dangerous Substance Data Summary Sheet

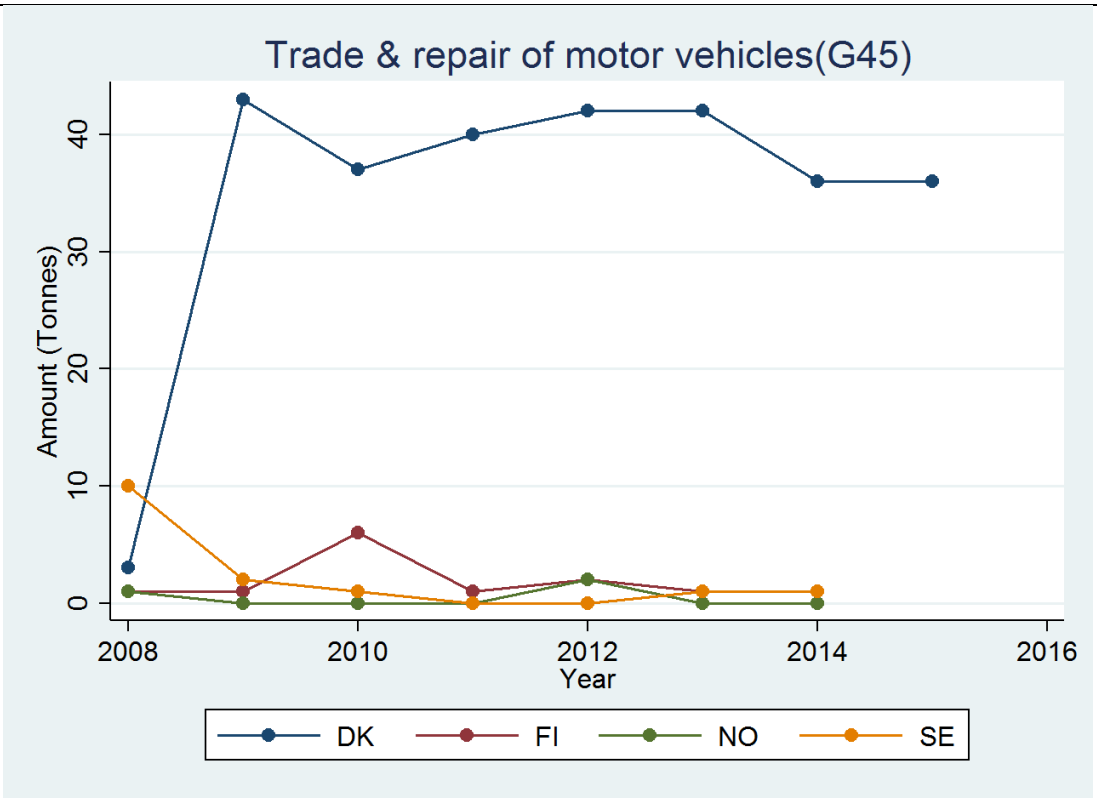

Figure 2 Trends in amounts of Stoddard solvent used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Sulphuric acid**
CAS No. (if applicable):	**7664-93-9**
AKA / Synonyms / Sub-Groups:	Acide Sulfurique, Dihydrogensulfate, phosphoric acid, Sulfuric Acid, sulphuric acid … %. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H314 GHS05
Industries (NACE R2 code) for which the substance is relevant:	Other mining and quarrying industry (B08), Manufacture (MFR) of chemicals industry (C20), MFR of basic metals (C24), MFR of fabricated metal products (C25), MFR of furniture (C31), Wholesale & retail trade & repair of motor vehicles etc (G45), Human health activities (Q86)
Expert evaluation score(s)*	Other mining and quarrying industry: 5 (1,1,3) MFR of chemicals industry: 5 (1,1,3) MFR of basic metals: 6 (1,2,3) MFR of fabricated metal products: 6 (1,2,3) MFR of furniture: 5 (1,1,3) Wholesale & retail trade & repair of motor vehicles etc: 8 (3,2,3) Human health activities: 5 (3,1,1)
Employment characteristics	
Total number of employed persons in these industries within the EU 28 (2014/5)	Other mining and quarrying industry: 191,187 MFR of chemicals industry: 1,100,000 MFR of basic metals: 960,270 MFR of fabricated metal products: 3,663,178 MFR of furniture: 980,000 Wholesale & retail trade & repair of motor vehicles etc: 3,825,269 Human health activities: 13,674,300
Trends in employment within industries (2008-2015)	Please see figures 1 and 2

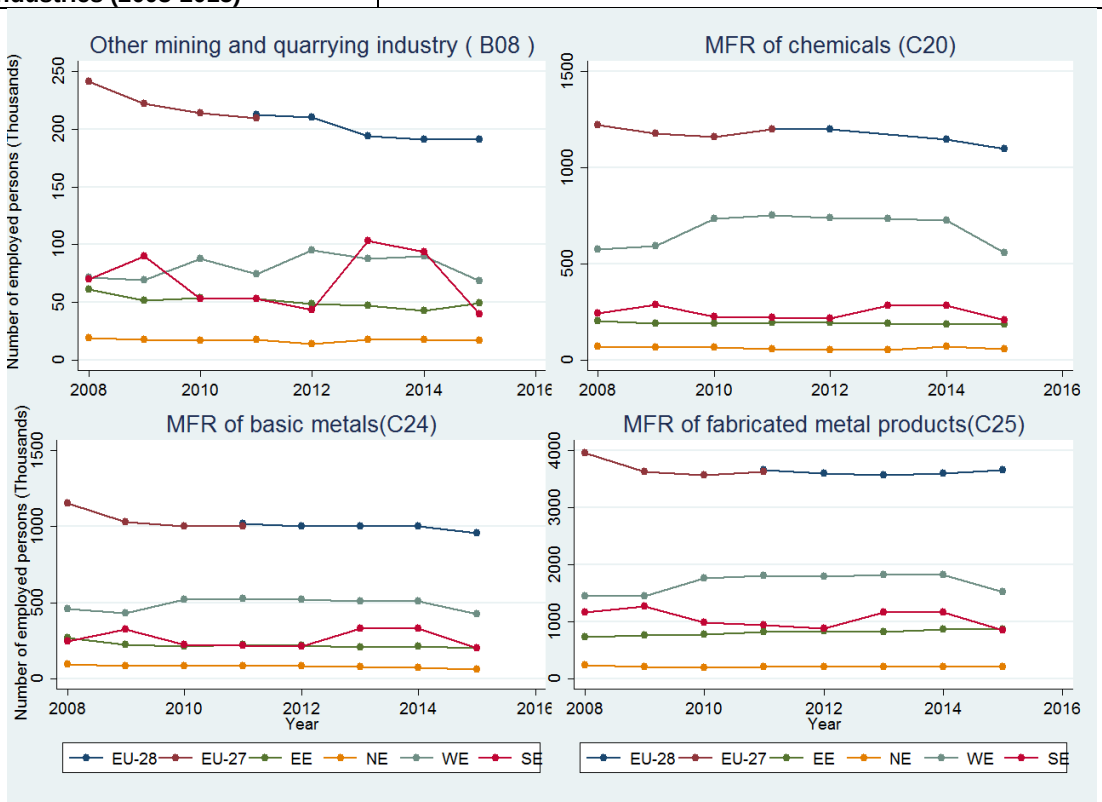

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Level 1 Dangerous Substance Data Summary Sheet

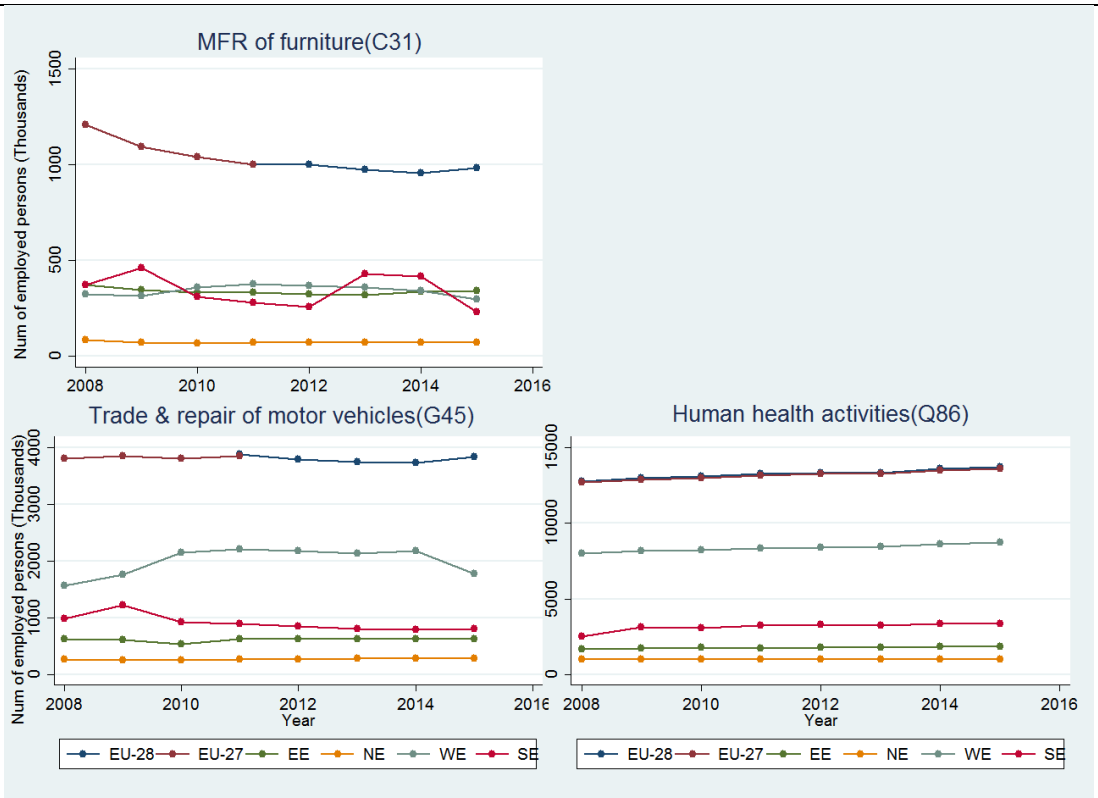

Figure 2 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) and Labour Force Survey (LFS) databases.

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figures 3 and 4 and Table 1

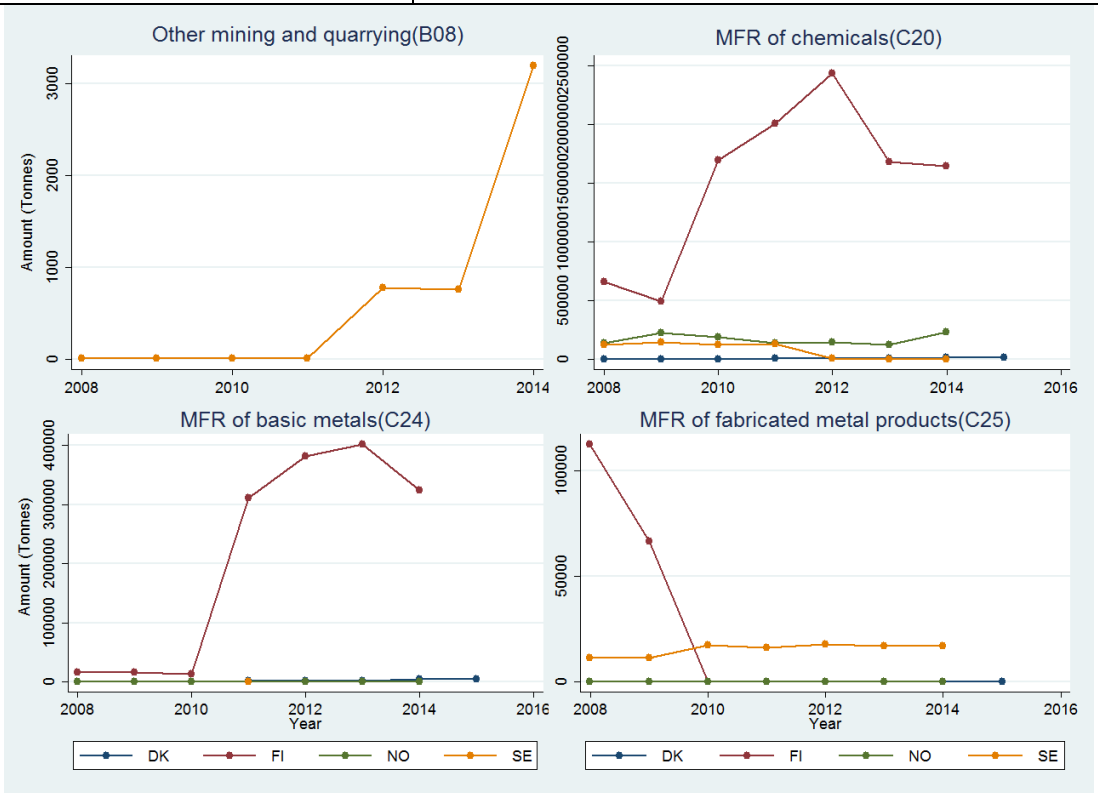

Figure 3 Trends in amounts of Sulphuric acid used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Level 1 Dangerous Substance Data Summary Sheet

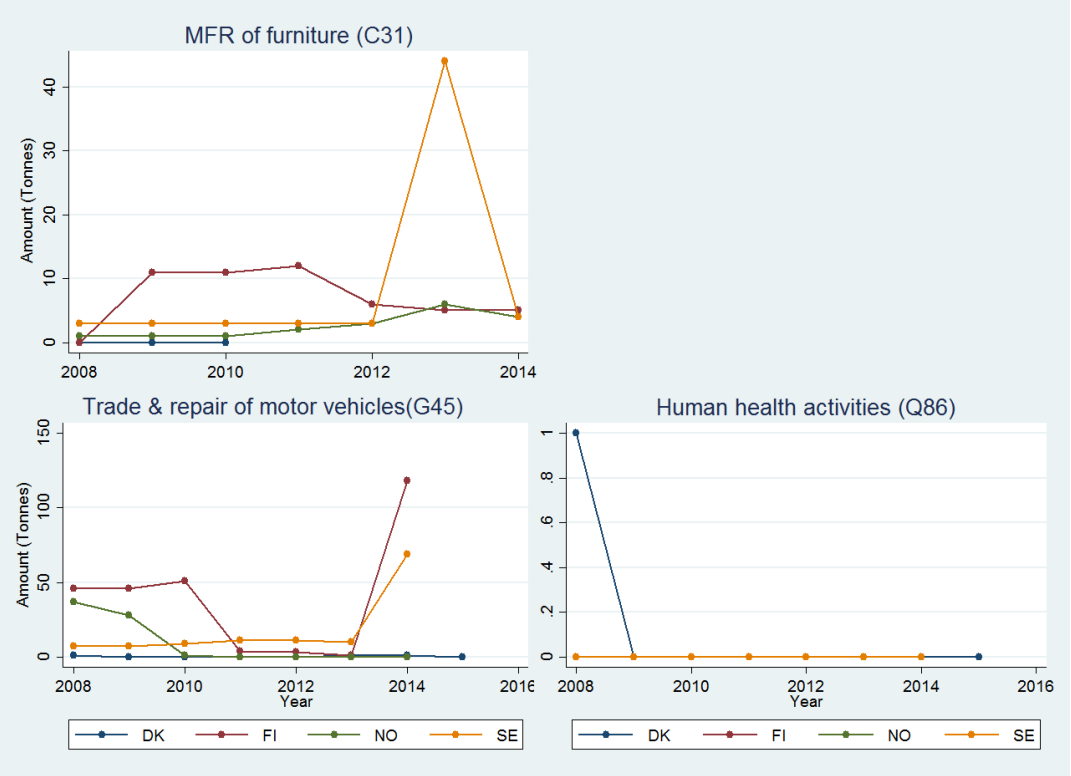

Figure 4 Trends in amounts of Sulphuric acid used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database.

Table 1 Trends in total volume (in Tonnes) of Sulphuric acid produced (2008-2015) within the manufacturing of chemicals industry (C20) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 20132434.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	-	-	-	-	15,851,979	15,761,307	18,619,063	18,423,921	68,656,272
EU27	-	-	-	-	15,851,562	15,758,311	18,611,374	18,400,844	68,622,093
BE	-	-	-	-	1,709,601	1,709,005	1,769,265	1,879,484	7,067,356
CZ	-	-	-	-	234,979	182,168	347,897	242,572	1,007,616
DE	-	-	-	-	4,740,882	4,658,245	5,904,366	5,672,103	20,975,596
ES	-	-	-	-	2,144,912	2,011,630	1,669,998	1,588,022	7,414,562
FI	-	-	-	-	1,039,455	NR	NR	1,441,558	2,481,014
FR	-	-	-	-	738,998	764,422	768,490	559,415	2,831,327
HR	-	-	-	-	417	2,996	7,689	23,077	34,179
HU	-	-	-	-	C	41,065	43,981	C	85,046
IT	-	-	-	-	891,742	830,089	1,173,289	964,237	3,859,357
LT	-	-	-	-	731,428	752,287	767,085	789,511	3,040,313
NO	-	-	-	-	128,778	C	236,510	234,288	599,576
PL	-	-	-	-	1,247,910	1,097,145	1,771,272	1,916,873	6,033,200
RS	-	-	-	-	C	C	84,142	C	84,142

BE=Belgium, CZ=Czech Republic, DE=Germany, ES=Spain, FI=Finland, FR=France, HR=Croatia, HU=Hungary, IT=Italy, LT=Lithuania, NO=Norway, PL=Poland, RS=Serbia, C= Confidential.
Note: The manufacturing chemical industries of Bosnia Herzegovina, Cyprus, Estonia, Iceland, Luxembourg, Latvia, Montenegro, The Former Yugoslav Republic of Macedonia (FYROM), Malta, Portugal, and Slovakia do not appear to have produced any Sulphuric acid during the period 2008-2015. Austria, Bulgaria, Denmark, Greece, Ireland, Netherlands, Romania, Sweden, Slovenia, Turkey and the United Kingdom appear to have produced Sulphuric acid within part of this period but the amounts have been confidential to the database.

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Talc ($Mg_3H_2(SiO_3)_4$)**
CAS No. (if applicable):	**14807-96-6**
AKA / Synonyms / Sub-Groups:	Talc, Trimagnesium, Trimagnesium dioxido -oxo- silane For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H302, H319, H331, H332, H335, H350, H372, H413, GHS06, GHS07, GHS08
Industries (NACE R2 code) for which the substance is relevant:	Manufacture of rubber & plastic products (C22), Construction of buildings (F41), Specialised construction activities (F43), Wholesale & retail trade & repair of motor vehicles & motorcycles (G45)
Expert evaluation score(s)*	Manufacture of rubber & plastic products: 7 |(3,2,2) Construction of buildings: 5 (1,2,2) Specialised construction activities: 5 (1,2,2) Wholesale & retail trade & repair of motor vehicles etc.: 6 (1,3,2)
Employment characteristics **Total number of employed persons in these industries within the EU 28 (2014/5)** **Trends in employment within industries (2008-2015)**	 Manufacture of rubber & plastic products: 1,700,000 Construction of buildings: 3,174,312 Specialised construction activities: 7,942,979 Wholesale & retail trade & repair of motor vehicles etc.: 3,825,269 Please see figure 1

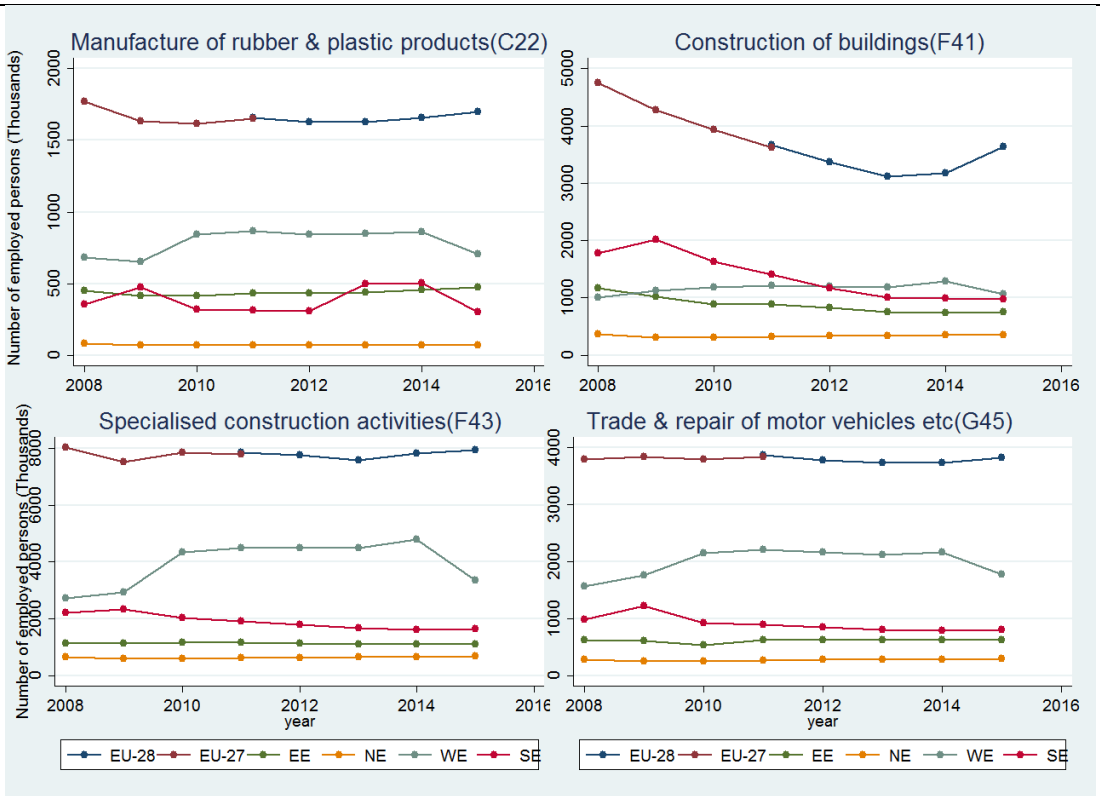

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics **Trends in amounts used or manufactured:**	 Please see figure 2

Level 1 Dangerous Substance Data Summary Sheet

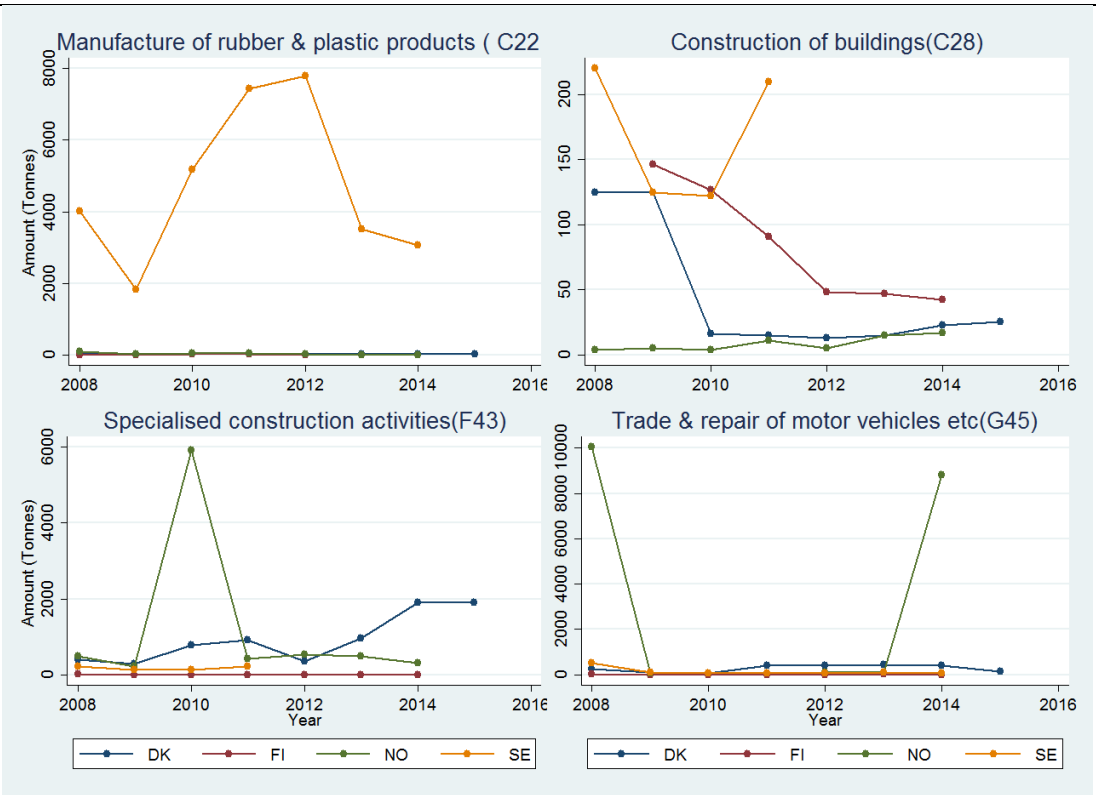

Figure 2 Trends in amounts of Talc (Mg3H2(SiO3)4) used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Metal Zinc (powder)**
CAS No. (if applicable):	**7440-66-6**
AKA / Synonyms / Sub-Groups:	Zn, Granulated zinc, Zinc (Powder), zinc dust.. For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H250, H260, H400, H410 GHS02 GHS09
Industries (NACE R2 code) for which the substance is relevant:	Manufacture (MFR) of chemicals (C20), MFR of basic metals (C24), MFR of fabricated metal products (C25), Specialised construction activities (F43), Wholesale & retail trade & repair of motor vehicles & motorcycles (G45)
Expert evaluation score(s)*	MFR of chemicals industry: 7 (3,3,1) MFR of basic metals: 4 (1,2,1) MFR of fabricated metal products: 3 (1,1,1) Specialised construction activities: 3 (1,1,1) Wholesale & retail trade & repair of motor vehicles: 3 (1,1,1)
Employment characteristics	
Total number of employed persons in these industries within the EU 28 (2014/5)	MFR of chemicals industry: 1,100,000 MFR of basic metals: 960,270 MFR of fabricated metal products: 3,663,178 Specialised construction activities: 7,942,979 Wholesale & retail trade & repair of motor vehicles: 3,825,269
Trends in employment within industries (2008-2015)	Please see figures 1 and 2

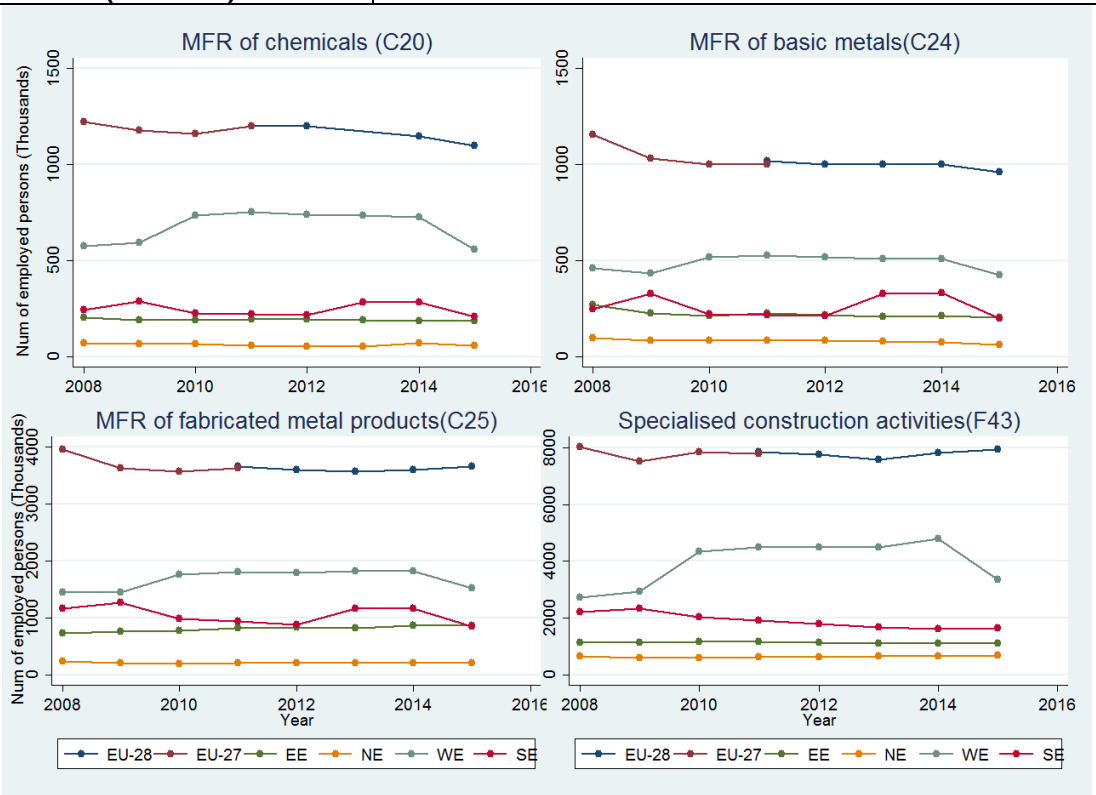

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

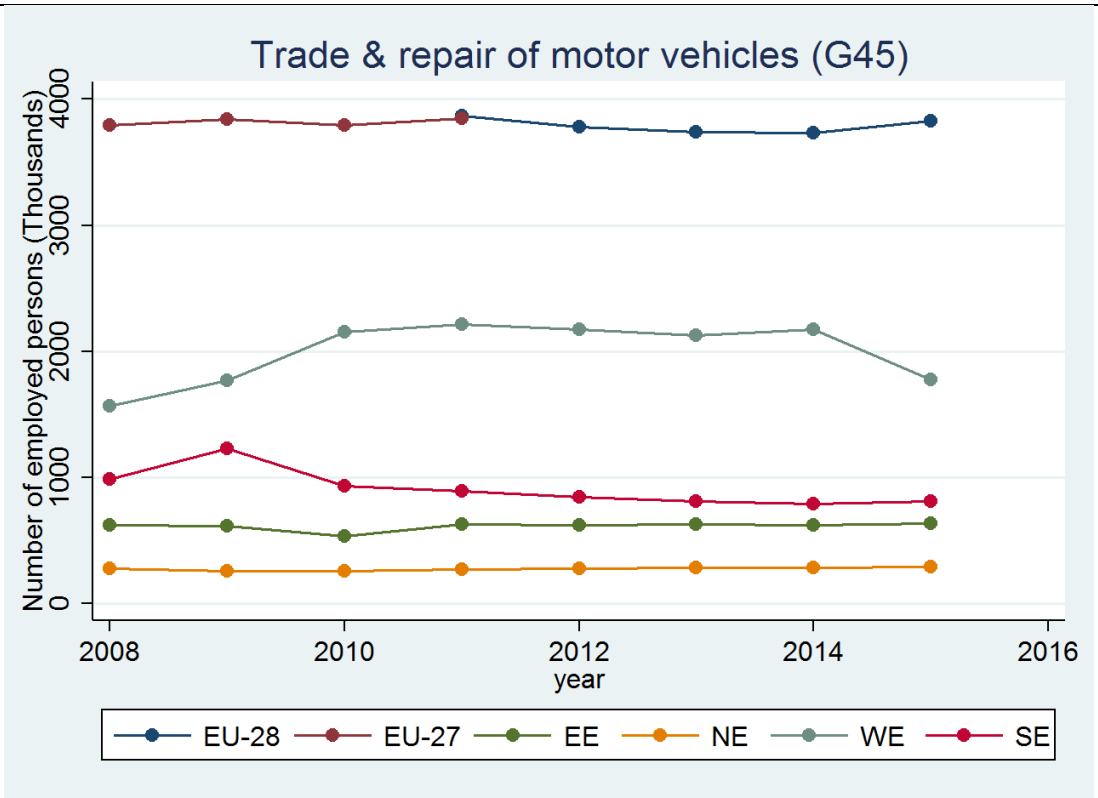

Figure 2 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figures 3 and 4

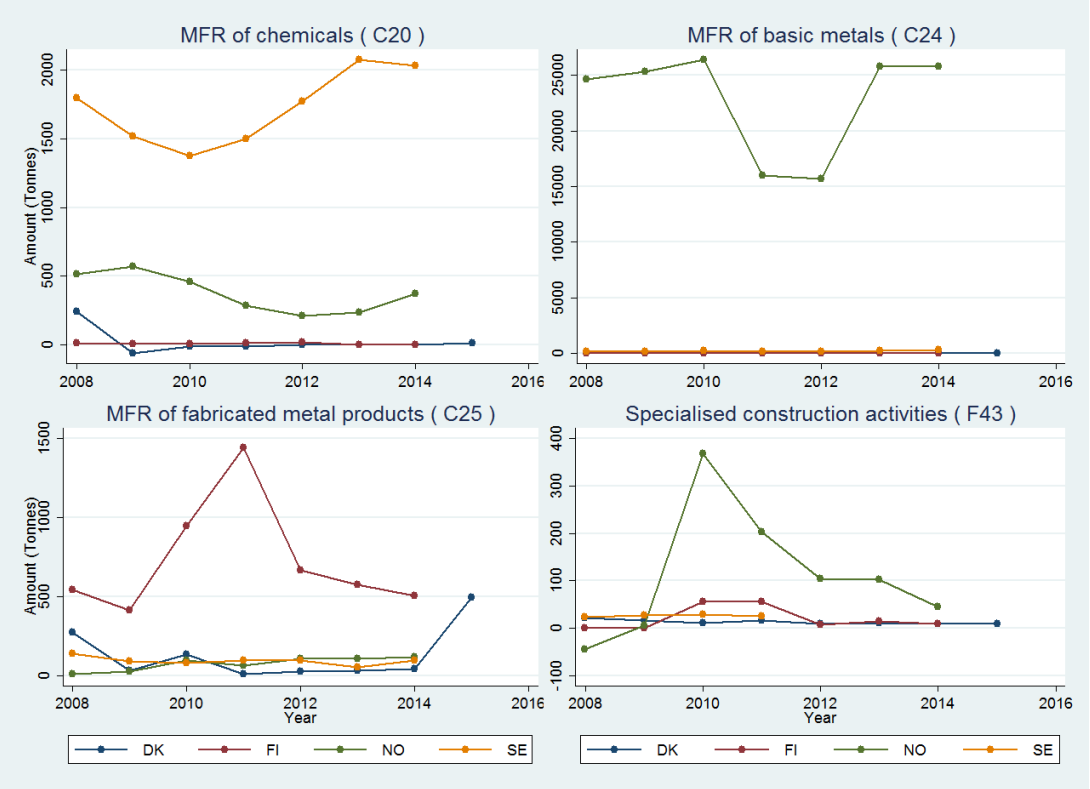

Figure 3 Trends in amounts of metal zinc used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Level 1 Dangerous Substance Data Summary Sheet

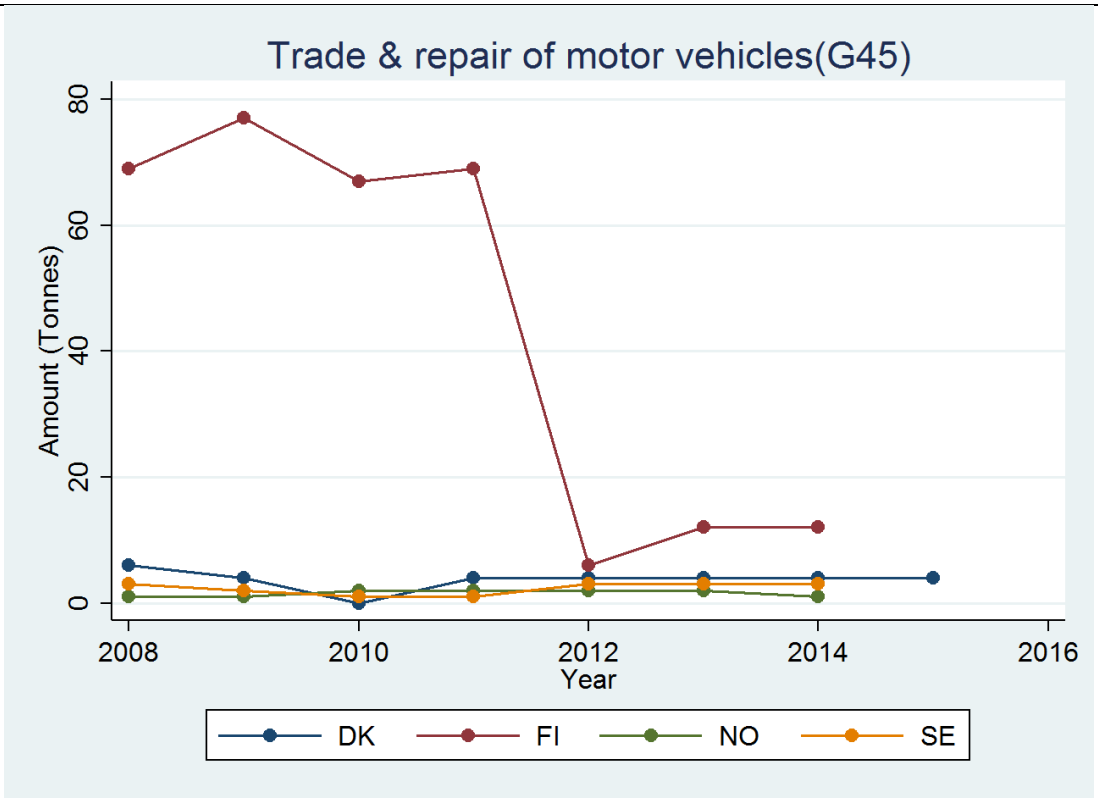

Figure 4 Trends in amounts of metal zinc used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance. The individual scores for each component (a,b,c) are provided inside the parenthesis.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Toluene**
CAS No. (if applicable):	**108-88-3**
AKA / Synonyms / Sub-Groups:	Methacide; Methane, phenyl-; Methylbenzene Methylbenzol; Phenylmethane; Tolu-Sol; Toluol; Anisen For a full list please look here
Substance identified from:	CLP Inventory
CLP Classification and labelling	Classification: H225, H315, H304, H336, H373, H361d GHS02, GHS07, GHS08
Industries (NACE R2 code) for which the substance is relevant:	Manufacture of coke & refined petroleum products (C19), Manufacture of chemicals (C20), Construction of buildings (F41), Specialised construction activities (F43)
Expert evaluation score(s)*	Manufacture of coke & refined petroleum products: 5 (1,2,2) Manufacture of chemicals industry: 6 (3,1,2) Construction of buildings: 5 (3,1,1) Specialised construction activities: 5 (3,1,1)
Employment characteristics	
Total number of employed persons in these industries within the EU 28 (2015)	Manufacture of coke & refined petroleum products: 111,827 Manufacture of chemicals industry: 1,100,000 Construction of buildings: 3,643,788 Specialised construction activities: 7,942,979
Trends in employment within industry (2008-2015)	Please see figure 1

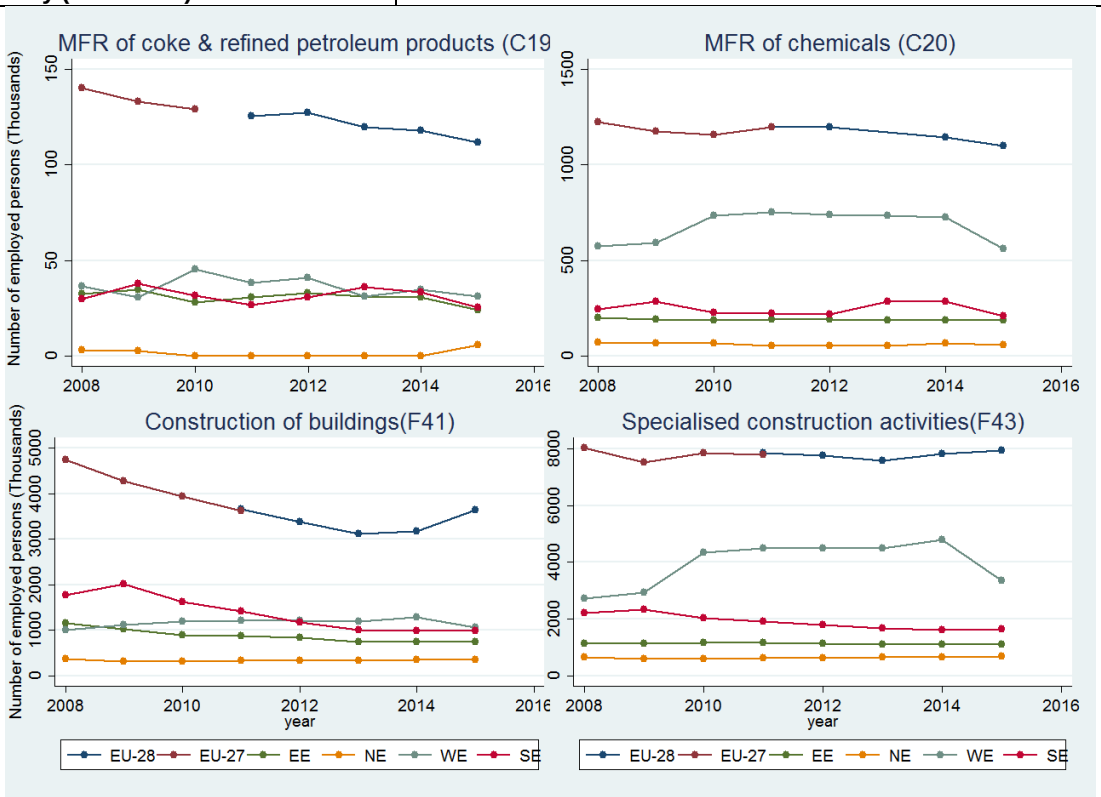

Figure 1 Trends in employment within industry (2006-2014) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figure 2 and Table 1

Level 1 Dangerous Substance Data Summary Sheet

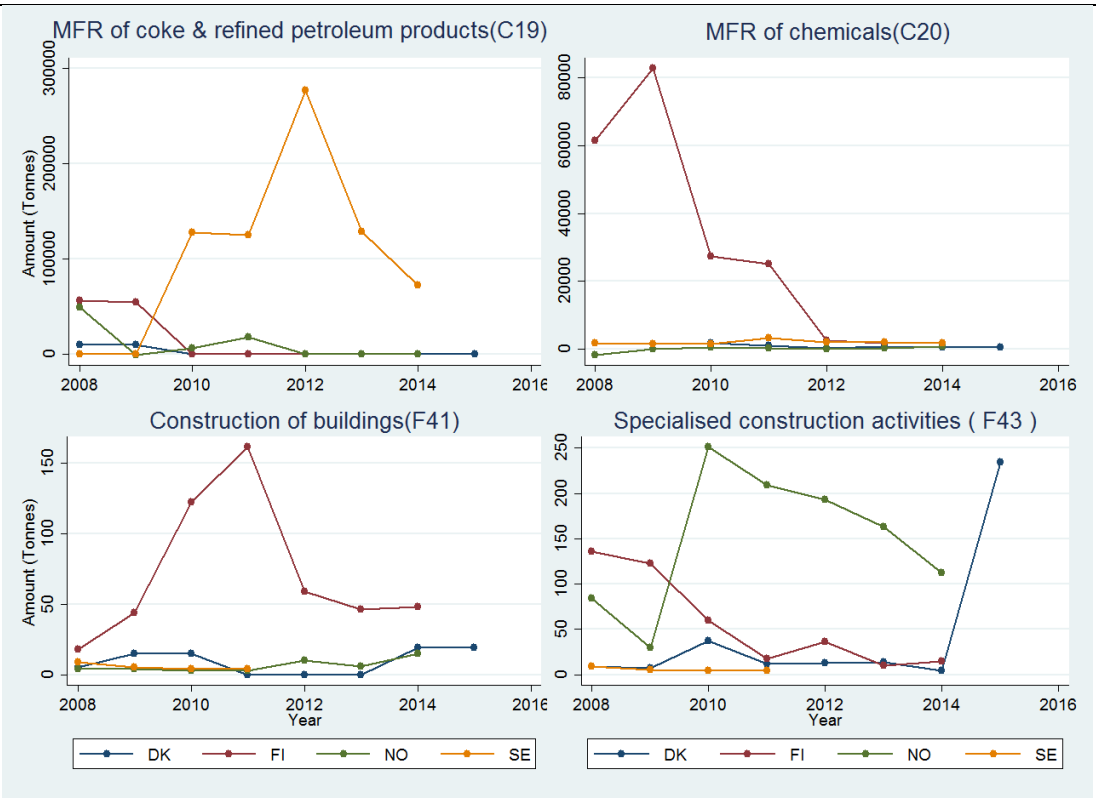

Figure 2 Trends in amounts of Toluene used within industries (2006-2014) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Table 1 Trends in total volume (in Tonnes) of Toluene produced (2008-2015) within the manufacturing of chemicals industry (C20) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 20141225.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	1,801,457	2,066,340	1,536,332	1,518,099	1,413,132	1,486,566	1,343,887	1,302,471	12,468,289
EU27	1,801,457	2,066,339	1,536,332	1,518,099	1,413,132	1,486,566	1,343,887	1,302,471	12,468,288
BE	C	57,760	66,743	C	57,822	72,222	57,763	25,269	337,582
CZ	21,533	12,432	19,624	22,351	18,712	C	C	C	94,652
DE	763,107	689,611	662,403	666,318	696997	706,041	636,322	591,337	5,412,136
ES	C	C	C	C	C	138,977	109,107	143,177	39,1261
FR	116,308	112,097	107,724	133,700	132,588	126,030	160,631	128,341	1,017,419
HR	0	1	0	0	0	0	0	0	1
HU	C	C	C	C	C	C	C	76,099	76,099
PL	NR	100,726	97,874	C	24,629	C	C	C	223,229
PT	140,608	119,728	98,809	116,987	114,255	154,253	121,282	125,323	991249
SK	C	C	C	C	C	C	C	41,934	41,934
UK	C	C	23	35	C	C	C	C	59

BE=Belgium, CZ=Czech Republic, DE=Germany, ES=Spain, FR=France, HR=Croatia, HU=Hungary, PL=Poland, PT=Portugal, SK=Slovakia, UK=United Kingdom. C= Confidential, NR=Not reported.
Note: The manufacturing chemical industries of Austria, Bosnia Herzegovina, Cyprus, Estonia, Ireland, Iceland, Lithuania, Luxembourg, Latvia, Malta, Montenegro, The Former Yugoslav Republic of Macedonia (FYROM), Norway, Sweden, and Slovenia do not appear to have produced any Toluene during the period 2008-2015. Bulgaria, Denmark, Finland, Greece, Italy, Netherlands, Romania, Serbia, Sweden, and Turkey appear to have produced Toluene within part of this period but the amounts have been confidential to the database.

Comments and observations	PRODCOM data suggest a downward trend in total production volume of Toluene following 2010. This is not surprising as Toluene is widely used in gravure printing and the volume of printed products is reduced amid the increased use of e-media. * Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance.

Level 1 Dangerous Substance Data Summary Sheet

Substance name:	**Xylene**
CAS No. (if applicable):	**1330-20-7**
AKA / Synonyms / Sub-Groups:	Dimethylbenzene, Methyltoluene, Xylol (mixed isomers) For a full list please look here
Substance identified from:	CLP Inventory
CLP classification and labelling	Classification: H226, H312, H315, H332 GHS02 GS07
Industries (NACE R2 code) for which the substance is relevant:	Manufacture (MFR) of coke & refined petroleum products (C19), MFR of chemicals (C20), MFR of rubber & plastic products (C22), MFR of machinery & equipment (C28), MFR of other transport equipment (C30), MFR of furniture (C31), Repair and installation of machinery & equipment (C33), Construction of buildings (F41), Civil engineering (F42), Specialised construction activities (F43), Human health activities (Q86), Residential care activities (Q87)
Expert evaluation score(s)*	MFR of coke & refined petroleum products: 5 (1,2,2) MFR of chemicals industry: 6 (3,1,2) MFR of rubber and plastic products: 7 (3,2,2) MFR of machinery and equipment: 6 (3,1,2) MFR of other transport equipment: 5 (2,1,2) MFR of furniture: 5 (2,1,2) Repair and installation of machinery & equipment: 5 (2,1,2) Construction of buildings: 6 (3,1,2) Civil engineering: 6 (3,1,2) Specialised construction activities: 6 (3,1,2) Human health activities: 6 (3,1,2) Residential care activities: 6 (3,1,2)
Employment characteristics	
Total number of employed persons in these industries within the EU 28 (2014/5)	MFR of coke & refined petroleum products: 111,827 MFR of chemicals industry: 1,100,000 MFR of rubber and plastic products: 1,700,000 MFR of machinery and equipment: 2,940,000 MFR of other transport equipment:738,012 MFR of furniture: 980,000 Repair and installation of machinery & equipment: 1,265,082 Construction of buildings: 3,174,312 Civil engineering: 1,564,970 Specialised construction activities: 7,942,979 Human health activities: 13,674,300 Residential care activities: 5,025,500
Trends in employment within industries (2008-2015)	Please see figures 1, 2 and 3

Level 1 Dangerous Substance Data Summary Sheet

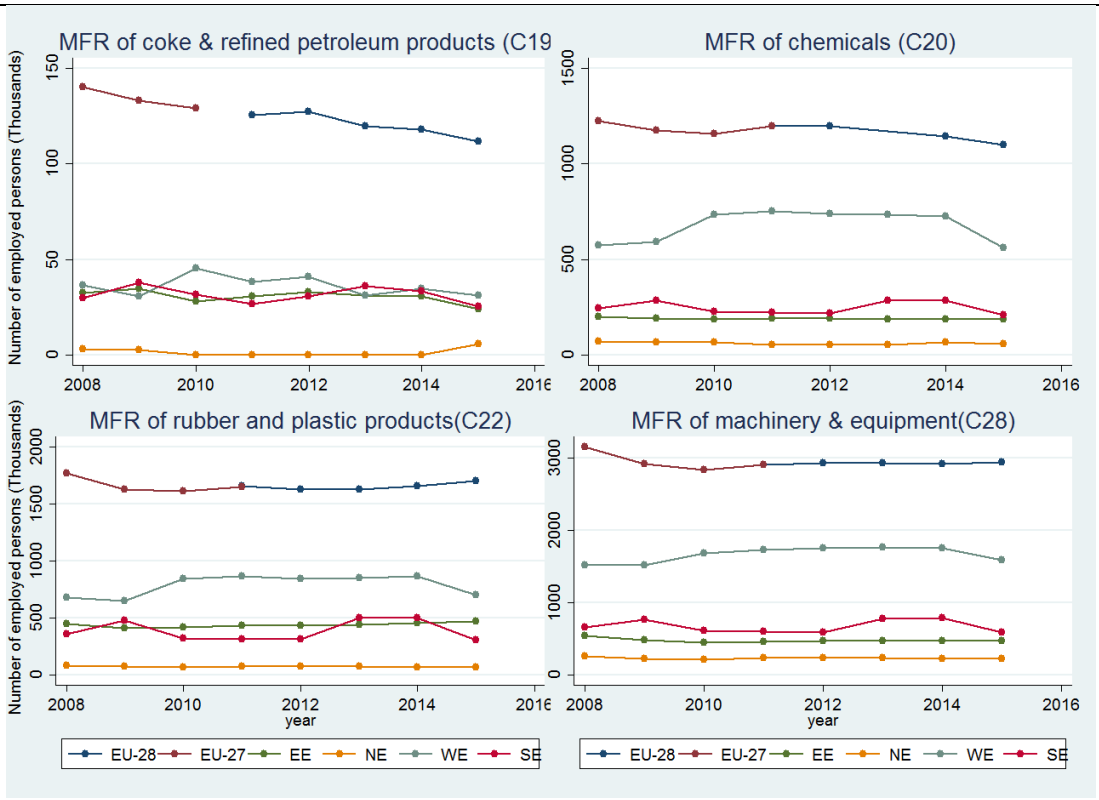

Figure 1 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: Structural business statistics (SBS) database.

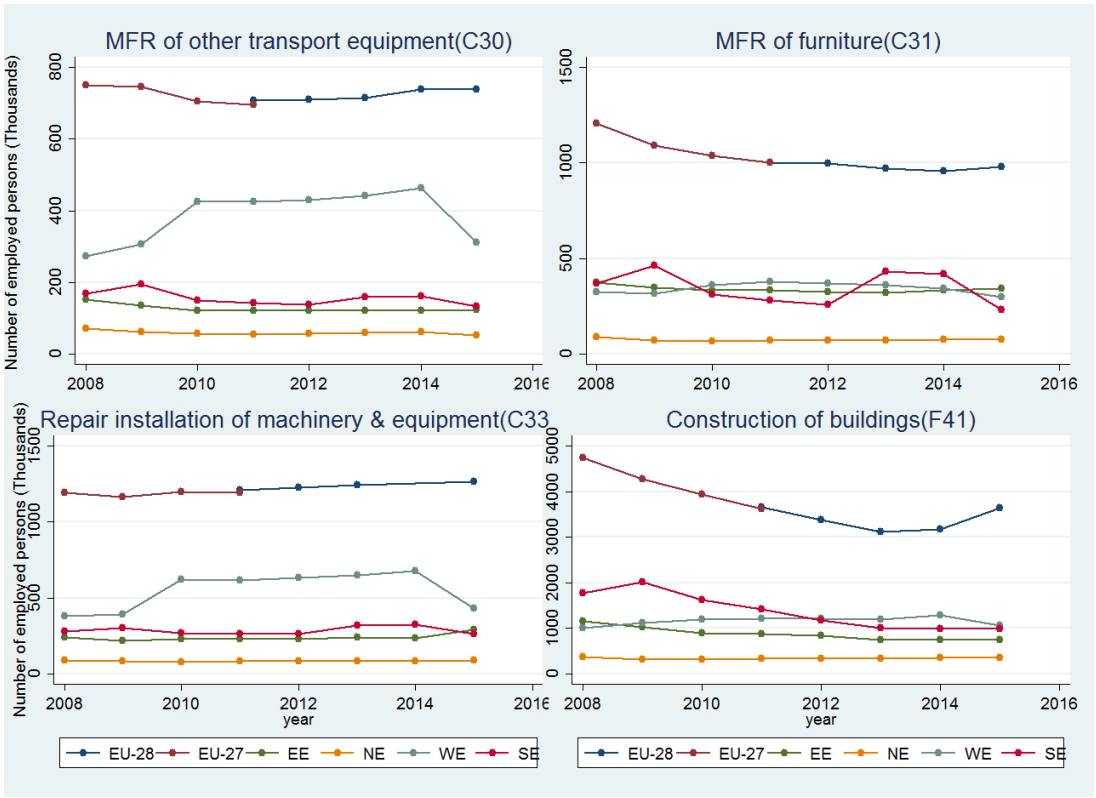

Figure 2 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: SBS.

Level 1 Dangerous Substance Data Summary Sheet

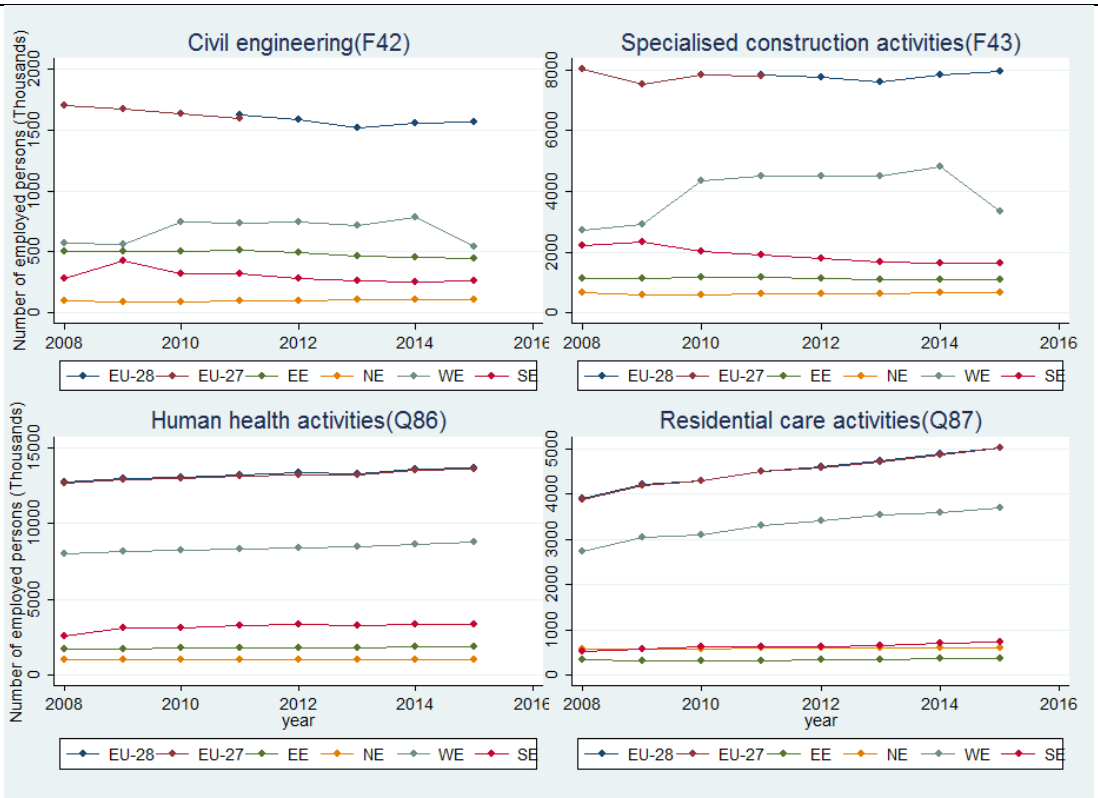

Figure 3 Trends in employment within industry (2008-2015) for geographical regions in Europe (EE=Eastern Europe, NE=Northern Europe, SE=Southern Europe, WE= Western Europe). Source of data: SBS and Labour Force Survey (LFS) databases.

Production/use characteristics	
Trends in amounts used or manufactured:	Please see figures 4, 5 and 6 and Tables 1, 2 and 3

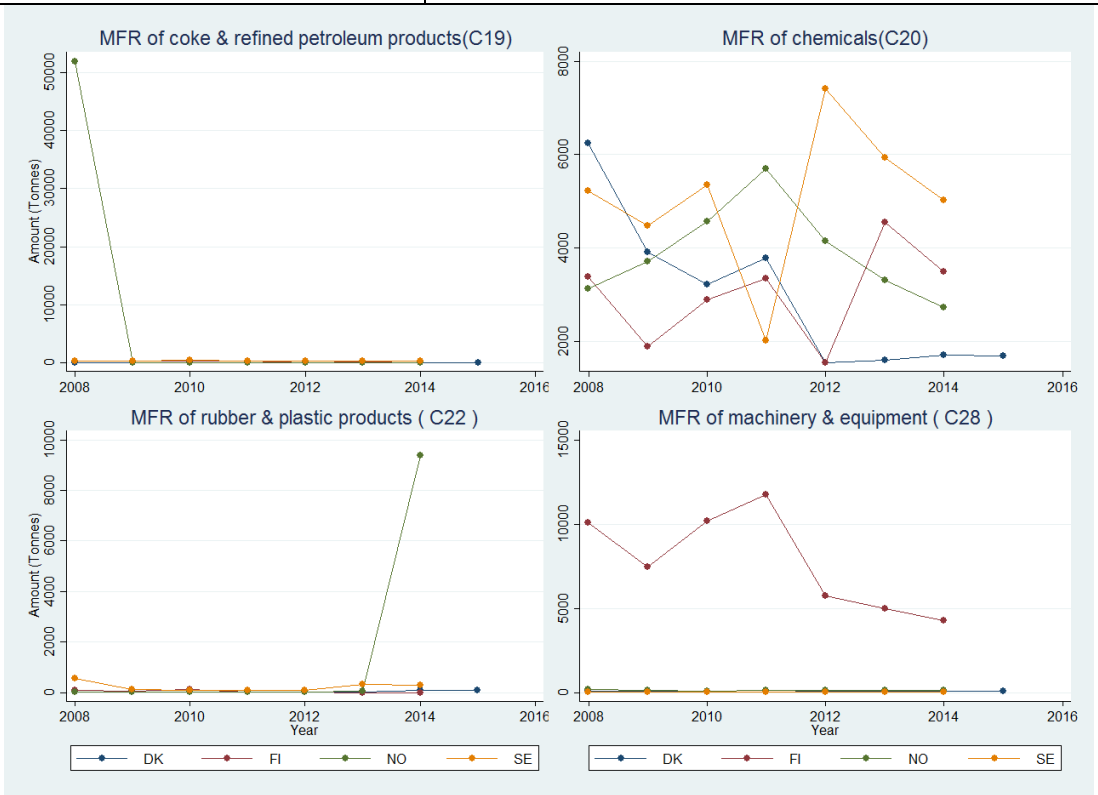

Figure 4 Trends in amounts of Xylene used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: Substances in Preparations in Nordic Countries (SPIN) database

Figure 5 Trends in amounts of Xylene used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: SPIN

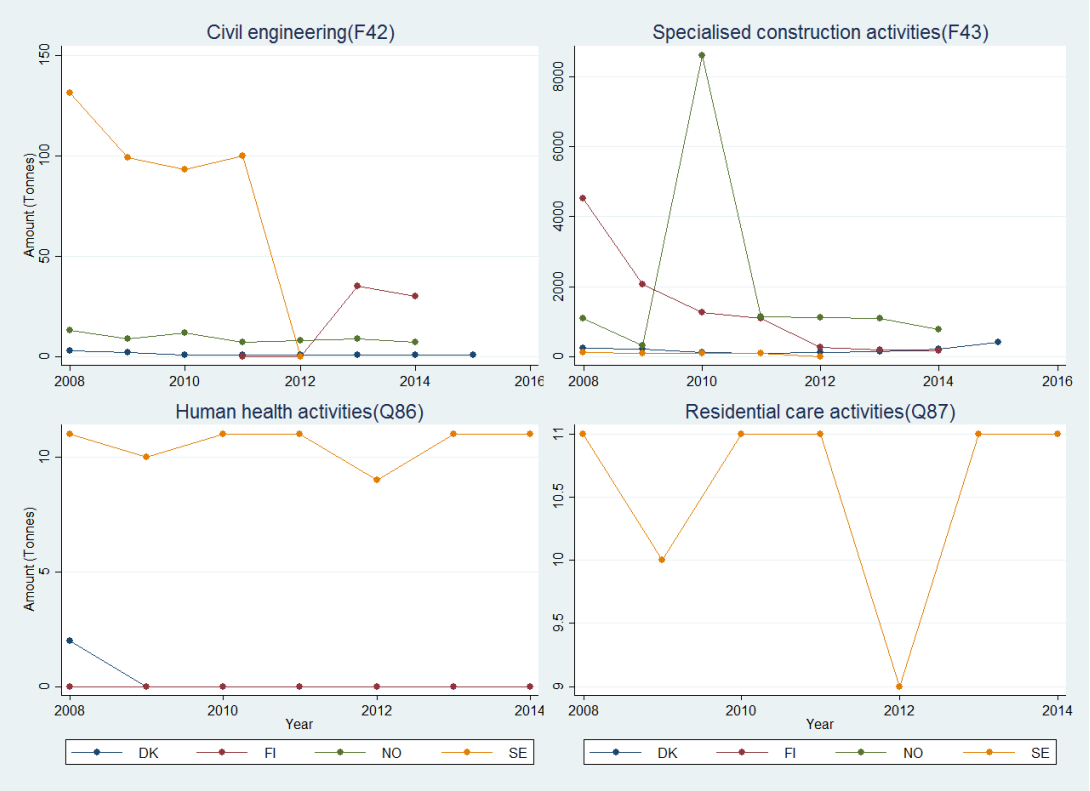

Figure 6 Trends in amounts of Xylene used within industries (2008-2015) in Nordic countries (DK=Denmark, FI=Finland, NO=Norway, SE=Sweden. Source of data: SPIN

Level 1 Dangerous Substance Data Summary Sheet

Table 1 Trends in total volume (in Tonnes) of o-Xylene produced (2008-2015) within the manufacturing of chemicals industry (C20) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 20141243.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	632,370	766,034	463,544	467,303	425,407	510,001	540,759	537,157	4,342,577
EU27	632,370	766,034	463,544	467,303	425,407	510,001	540,759	537,157	4,342,577
DE	180,419	173,889	179,092	178,827	175,891	169,603	175,688	175,715	1,409,124
HU	C	C	C	C	C	C	C	25,329	25,329
PL	C	21,164	5,078	C	C	C	C	0	26,242
PT	34,981	23,408	19,503	31,940	30,427	41,571	8,820	0	190,653
SK	C	C	C	C	C	C	C	8,615	8,615

DE=Germany, HU=Hungary, PL=Poland, PT=Portugal, SK=Slovakia, C= Confidential.

Note: The manufacturing chemical industries of Belgium, Bosnia Herzegovina, Cyprus, Czech Republic, Denmark, Estonia, Finland, Croatia, Greece, Ireland, Iceland, Lithuania, Luxembourg, Latvia, Montenegro, The Former Yugoslav Republic of Macedonia (FYROM), Malta, Norway, Romania, Sweden, Serbia, Slovenia, and the United Kingdom, do not appear to have produced any o-Xylene during the period 2008-2015. Austria, Bulgaria, Spain, France, Italy, Netherlands, and Turkey appear to have produced o-Xylene within part of this period but the amounts have been confidential to the database.

Table 2 Trends in total volume (in Tonnes) of p-Xylene produced (2008-2015) within the manufacturing of chemicals industry (C20) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 20141245.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	996,078	1,190,875	1,273,015	1,644,489	1,773,042	1,743,543	1,458,117	1,568,627	11,647,789
EU27	996,078	1,190,875	1,273,015	1,644,489	1,773,042	1,743,543	1,458,117	1,568,627	11,647,789
DE	392,016	367,405	361,939	370,015	348,157	341,289	348,624	328,964	2,858,409
PL	C	100	0	C	C	C	C	C	100
PT	101,483	73,259	52,891	89,792	82,537	93,865	23,823	11	517,663

DE=Germany, PL=Poland, PT=Portugal, C= Confidential.

Note: The manufacturing chemical industries of Austria, Bosnia Herzegovina, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, Croatia, Greece, Ireland, Iceland, Lithuania, Luxembourg, Latvia, Montenegro, The Former Yugoslav Republic of Macedonia (FYROM), Malta, Norway, Romania, Sweden, Serbia, Slovenia, and Slovakia, do not appear to have produced any p-Xylene during the period 2008-2015. Belgium, Spain, France, Italy, Netherlands, Turkey, and the United Kingdom appear to have produced p-Xylene within part of this period but the amounts have been confidential to the database.

Table 1 Trends in total volume (in Tonnes) of m-Xylene and mixed xylene isomers produced (2008-2015) within the manufacturing of chemicals industry (C20) in EU, EAA and EU candidate member countries. Source of data: PRODuCtion Of Manufactured goods (PRODCOM) database code 20141247.

Country	2008	2009	2010	2011	2012	2013	2014	2015	Total
EU28	453,098	419,809	457,858	400,351	414,936	370,414	452,637	434,295	3,403,403
EU27	453,096	419,807	457,856	400,349	414,934	370,413	452,635	434,294	3,403,389
DE	54724	C	84,897	C	121,005	C	C	C	260,626
EE	C	C	2	3	3	3	3	4	17
HR	2	2	2	2	2	1	2	1	14
HU	C	C	C	C	C	C	C	4,434	4,434
IT	C	C	C	C	C	C	C	22,821	22,821
PT	26,778	22,999	32,299	15,913	11,244	27,453	105,034	139,159	380,883
SK	C	C	C	C	C	C	C	46,993	46,993
UK	C	C	C	C	C	C	122	168	290

DE=Germany, EE=Estonia, HR=Croatia, HU=Hungary, IT-Italy, PT=Portugal, SK=Slovakia, UK=United Kingdom, C= Confidential.

Note: The manufacturing chemical industries of Austria, Bulgaria, Bosnia Herzegovina, Cyprus, Ireland, Iceland, Luxembourg, Latvia, Montenegro, The Former Yugoslav Republic of Macedonia (FYROM), Malta, Netherlands, Norway, Romania, Slovenia, Serbia and Turkey do not appear to have produced any m-Xylene and mixed xylene isomers during the period 2008-2015. Belgium, Czech Republic, Denmark, Spain, Finland, France, Greece, Poland and Sweden appear to have produced m-Xylene and mixed xylene isomers within part of this period but the amounts have been confidential to the database.

Comments and observations	* Score of the importance of the dangerous substance as evaluated by two independent experts based on a) the number of workers affected within a relevant industry, b) the likelihood of occurrence of the exposure to the substance and c) the severity of its health effects and impact on the daily life of the worker. Score scale 3-9 with 9 indicating the highest importance.