

## List of substances banned for use in cosmetic products as from 1 December 2010

The following substances are classified as CMR substances of category 1A, 1B or 2 under Commission Regulation 790/2009, amending Regulation 1272/2008.<sup>1</sup> Therefore they are banned for use in cosmetic products as from 1 December 2010 (which is the date of application of their classification), in accordance with Article 15 of the Cosmetics Regulation 1223/2009.

Please note that some of the substances classified as CMR substances under Commission Regulation (EC) No 790/2009 **had already been regulated in Annex II to the Cosmetics Regulation through previous adaptations to technical progress of the Annexes to the Cosmetics Directive** (which had been taken over by the Cosmetics Regulation at the time of its adoption in November 2009). They **continue therefore to be listed in this Annex** and to be banned for use in cosmetics, and **are thus not included in the list below**.

In addition, some substances classified as CMR substances under Commission Regulation (EC) No 790/2009 are considered to be **covered by existing entries in Annex II** to the Cosmetics Regulation and are **not included in the list below**.

| Chemical name   | EC No     | CAS No      |
|---|-----------|-------------|
| <i>O</i> -isobutyl- <i>N</i> -ethoxy carbonylthiocarbamate  | 434-350-4 | 103122-66-3 |
| chlorpropham (ISO);<br>isopropyl 3-chlorocarbanilate  | 202-925-7 | 101-21-3    |
| hydroxylammonium nitrate  | 236-691-2 | 13465-08-2  |
| reaction mass of: 4,7-bis(mercaptomethyl)-3,6,9-trithia-1,11-undecanedithiol-;<br>4,8-bis(mercaptomethyl)-3,6,9-trithia-1,11-undecanedithiol;<br>5,7-bis(mercaptomethyl)-3,6,9-trithia-1,11-undecanedithiol | 427-050-1 | -           |
| cobalt acetate  | 200-755-8 | 71-48-7     |
| cobalt nitrate  | 233-402-1 | 10141-05-6  |
| cobalt carbonate  | 208-169-4 | 513-79-1    |
| nickel dichloride   | 231-743-0 | 7718-54-9   |

<sup>1</sup> This list does not contain the substance Musk Ketone (CAS 81-14-1), even though it has been classified as a CMR 2 substance by Commission Regulation 790/2009. Indeed, Musk Ketone is already listed under Annex III, entry 97 of the Cosmetics Regulation and the data as published in the RAR on Musk Ketone, which was the basis for the official CMR2 classification of the material, was also taken into consideration in the second review of the material by the SCCNFP in 2004, which led to the transfer of the material from a preliminary regulation (Annex III, part 2 of the Cosmetics Directive) to a permanent regulation (Annex III, part 1 of the Cosmetics Directive) in the same year. Therefore, it can be considered that this substance has been subject to "evaluation and approval" of the SCCS and that it remains regulated in Annex III to the Cosmetics Regulation, entry 97.

| <b>Chemical name</b>   | <b>EC No</b>  | <b>CAS No</b>  |
|--|---------------|----------------|
| nickel dinitrate; [1]  | 236-068-5 [1] | 13138-45-9 [1] |
| nitric acid, nickel salt [2]   | 238-076-4 [2] | 14216-75-2 [2] |
| dibutyltin dichloride;<br>(DBTC)   | 211-670-0     | 683-18-1       |
| 4,4'-bis( <i>N</i> -carbamoyl-4-methylbenzenesulfonamide)diphenylmethane   | 418-770-5     | 151882-81-4    |
| 6-glycidyloxynapht-1-yl oxymethyloxirane   | 429-960-2     | 27610-48-6     |
| 2-(2-aminoethylamino)ethanol<br>(AEEA)   | 203-867-5     | 111-41-1       |
| 1,2-diethoxyethane   | 211-076-1     | 629-14-1       |
| ( <i>E</i> )-3-[1-[4-[2-(dimethylamino)ethoxy]phenyl]-2-phenylbut-1-enyl]phenol  | 428-010-4     | 82413-20-5     |
| 2-butyryl-3-hydroxy-5-thiocyclohexan-3-yl-cyclohex-2-en-1-one  | 425-150-8     | 94723-86-1     |
| profoxydim (ISO);<br>2-{( <i>EZ</i> )-1-[( <i>2RS</i> )-2-(4-chlorophenoxy)propoxyimino]butyl}-3-hydroxy-5-(thian-3-yl)cyclohex-2-en-1-one   | -             | 139001-49-3    |
| tepraloxym (ISO);<br>( <i>RS</i> )-( <i>EZ</i> )-2-{1-[( <i>2E</i> )-3-chloroallyloxyimino]propyl}-3-hydroxy-5-perhydropyran-4-ylcyclohex-2-en-1-one   | -             | 149979-41-9    |
| 1,2-benzenedicarboxylic acid;<br>di-C <sub>6-8</sub> -branched alkylesters, C <sub>7</sub> -rich   | 276-158-1     | 71888-89-6     |
| reaction mass of: diester of 4,4'-methylenebis[2-(2-hydroxy-5-methylbenzyl)-3,6-dimethylphenol] and 6-diazo-5,6-dihydro-5-oxonaphthalene-1-sulfonic acid (1:2);<br>triester of 4,4'-methylenebis[2-(2-hydroxy-5-methylbenzyl)-3,6-dimethylphenol] and 6-diazo-5,6-dihydro-5-oxonaphthalene-1-sulfonic acid (1:3) | 427-140-9     | -              |
| diammonium 1-hydroxy-2-(4-(4-carboxyphenylazo)-2,5-dimethoxyphenylazo)-7-amino-3-naphthalenesulfonate  | 422-670-7     | -              |
| 3-oxoandrost-4-ene-17-β-carboxylic acid  | 414-990-0     | 302-97-6       |
| ( <i>Z</i> )-2-methoxymino-2-[2-(tritylamino)thiazol-4-yl]acetic acid  | 431-520-1     | 64485-90-1     |

| Chemical name   | EC No  | CAS No   |
|---|--|--|
| reaction mass of: succinic acid;<br>monopersuccinic acid;<br>dipersuccinic acid;<br>monomethyl ester of succinic acid;<br>monomethyl ester of persuccinic acid;<br>dimethyl succinate;<br>glutaric acid;<br>monoperglutaric acid;<br>diperlutaric acid;<br>monomethyl ester of glutaric acid;<br>monomethyl ester of perglutaric acid;<br>dimethyl glutarate;<br>adipic acid;<br>monoperadipic acid;<br>diperadipic acid;<br>monomethyl ester of adipic acid;<br>monomethyl ester of peradipic acid;<br>dimethyl adipate;<br>hydrogen peroxide;<br>methanol;<br>water           | 432-790-1  | -  |
| 4-mesyl-2-nitrotoluene  | 430-550-0  | 1671-49-4  |
| * chrysoidine;<br>4-(phenylazo)benzene-1,3-diamine  | 207-803-7  | 495-54-5   |
| * chrysoidine monohydrochloride;<br>4-phenylazophenylene-1,3-diamine monohydrochloride;<br>[1]<br>chrysoidine monoacetate;<br>4-(phenylazo)benzene-1,3-diamine monoacetate; [2]<br>chrysoidine acetate;<br>4-(phenylazo)benzene-1,3-diamine acetate; [3]<br>chrysoidine- <i>p</i> -dodecylbenzenesulfonate;<br>dodecylbenzenesulfonic acid, compound with 4-<br>(phenylazo)benzene-1,3-diamine (1:1); [4]<br>chrysoidine dihydrochloride;<br>4-(phenylazo)benzene-1,3-diamine dihydrochloride; [5]<br>chrysoidine sulfate;<br>bis[4-(phenylazo)benzene-1,3-diamine] sulfate [6] | 208-545-8 [1]<br>278-290-5 [2]<br>279-116-0 [3]<br>264-409-8 [4]<br>281-549-5 [5]<br>282-432-1 [6] | 532-82-1 [1]<br>75660-25-2 [2]<br>79234-33-6 [3]<br>63681-54-9 [4]<br>83968-67-6 [5]<br>84196-22-5 [6] |
| * chrysoidine C <sub>10-14</sub> -alkyl derivatives and;<br>benzenesulfonic acid, mono-C <sub>10-14</sub> -alkyl derivatives,<br>compounds with 4-(phenylazo)-1,3-benzenediamine; [1]<br>chrysoidine compound with dibutyl-naphthalene sulfonic<br>acid;<br>dibutyl-naphthalenesulfonic acid, compound with 4-<br>(phenylazo)benzene-1,3-diamine (1:1) [2]  | 286-946-7 [1]<br>304-236-8 [2]   | 85407-90-5 [1]<br>94247-67-3 [2]   |
| piperazine;<br>[liquid]   | 203-808-3  | 110-85-0   |
| hydroxylamine ...%<br>[≤ 55% in aqueous solution]   | 232-259-2  | 7803-49-8  |

\* These substances are prohibited when used as a substance in hair dye products, under entry 1293 of Annex II to Regulation 1223/2009. However, as from 1 December 2010, they are **banned for use in all cosmetic products**.

| Chemical name   | EC No  | CAS No   |
|---|--|--|
| mepanipyrim;<br>4-methyl- <i>N</i> -phenyl-6-(1-propynyl)-2-pyrimidinamine  | -  | 110235-47-7  |
| hydroxylammonium hydrogensulfate;<br>hydroxylamine sulfate (1:1)  | 233-154-4  | 10046-00-1   |
| (6 <i>R</i> - <i>trans</i> )-1-((7-ammonio-2-carboxylato-8-oxo-5-thia-1-azabicyclo-[4.2.0]oct-2-en-3-yl)methyl)pyridinium iodide  | 423-260-0  | 100988-63-4  |
| forchlorfenuron (ISO);<br>1-(2-chloro-4-pyridyl)-3-phenylurea   | -  | 68157-60-8   |
| cinidon ethyl (ISO);<br>ethyl (Z)-2-chloro-3-[2-chloro-5-(cyclohex-1-ene-1,2-dicarboximido)phenyl]acrylate  | -  | 142891-20-1  |
| <i>N</i> -[6,9-dihydro-9-[[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl]-6-oxo-1 <i>H</i> -purin-2-yl]acetamide   | 424-550-1  | 84245-12-5   |
| molybdenum trioxide   | 215-204-7  | 1313-27-5  |
| 2,2'-((3,3',5,5'-tetramethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(oxyethylene))-bis-oxirane   | 413-900-7  | 85954-11-6   |
| trifluralin (ISO) (containing < 0.5 ppm NPDA);<br>$\alpha,\alpha,\alpha$ -trifluoro-2,6-dinitro- <i>N,N</i> -dipropyl- <i>p</i> -toluidine (containing < 0.5 ppm NPDA);<br>2,6-dinitro- <i>N,N</i> -dipropyl-4-trifluoromethylaniline (containing < 0.5 ppm NPDA);<br><i>N,N</i> -dipropyl-2,6-dinitro-4-trifluoromethylaniline (containing < 0.5 ppm NPDA) | 216-428-8  | 1582-09-8  |
| piperazine;<br>[solid]  | 203-808-3  | 110-85-0   |
| hydroxylamine ....%<br>[> 55% in aqueous solution]  | 232-259-2  | 7803-49-8  |
| hydroxylammonium chloride;<br>hydroxylamine hydrochloride; [1]<br>bis(hydroxylammonium) sulfate;<br>hydroxylamine sulfate (2:1) [2]   | 226-798-2 [1]<br>233-118-8 [2]                                   | 5470-11-1 [1]<br>10039-54-0 [2]                                  |
| 4,4'-methylenediphenyl diisocyanate;<br>diphenylmethane-4,4'-diisocyanate; [1]<br>2,2'-methylenediphenyl diisocyanate;<br>diphenylmethane-2,2'-diisocyanate; [2]<br><i>o</i> -( <i>p</i> -isocyanatobenzyl)phenyl isocyanate;<br>diphenylmethane-2,4'-diisocyanate; [3]<br>methylenediphenyl diisocyanate [4]   | 202-966-0 [1]<br>219-799-4 [2]<br>227-534-9 [3]<br>247-714-0 [4] | 101-68-8 [1]<br>2536-05-2 [2]<br>5873-54-1 [3]<br>26447-40-5 [4] |
| mancozeb (ISO);<br>manganese ethylenebis(dithiocarbamate) (polymeric) complex with zinc salt  | -  | 8018-01-7  |
| maneb (ISO);<br>manganese ethylenebis(dithiocarbamate) (polymeric)  | 235-654-8  | 12427-38-2   |
| benfuracarb (ISO);<br>ethyl <i>N</i> -[2,3-dihydro-2,2-dimethylbenzofuran-7-yloxy-carbonyl(methyl)aminothio]- <i>N</i> -isopropyl- $\beta$ -alaninate   | -  | 82560-54-1   |
| phoxim (ISO);<br>$\alpha$ -(diethoxyphosphinothioylimino) phenylacetonitrile  | 238-887-3  | 14816-18-3   |

| <b>Chemical name</b>   | <b>EC No</b>   | <b>CAS No</b>  |
|--|--|--|
| glufosinate ammonium (ISO);<br>ammonium 2-amino-4-<br>(hydroxymethylphosphinyl)butyrate  | 278-636-5  | 77182-82-2   |
| furfuryl alcohol   | 202-626-1  | 98-00-0  |
| 1,2-epoxy-4-epoxyethylcyclohexane;<br>4-vinylcyclohexene diepoxide   | 203-437-7  | 106-87-6   |
| reaction mass of: Ca salicylates (branched C <sub>10-14</sub> and C <sub>18-30</sub> alkylated);<br>Ca phenates (branched C <sub>10-14</sub> and C <sub>18-30</sub> alkylated);<br>Ca sulfurised phenates (branched C <sub>10-14</sub> and C <sub>18-30</sub> alkylated)   | 415-930-6  | -  |
| <i>N,N'</i> -diacetylbenzidine   | 210-338-2  | 613-35-4   |
| cyclohexylamine  | 203-629-0  | 108-91-8   |
| hydroxylammonium hydrogensulfate;<br>hydroxylamine sulfate(1:1); [1]<br>hydroxylamine phosphate; [2]<br>hydroxylamine dihydrogenphosphate; [3]<br>hydroxylamine 4-methylbenzenesulfonate [4]   | 233-154-4 [1]<br>244-077-0 [2]<br>242-818-2 [3]<br>258-872-5 [4] | 10046-00-1 [1]<br>20845-01-6 [2]<br>19098-16-9 [3]<br>53933-48-5 [4] |
| Refractory Ceramic Fibres, Special Purpose Fibres, with<br>the exception of those specified elsewhere in this<br>Annex;<br>[Man-made vitreous (silicate) fibres with random<br>orientation with alkaline oxide and alkali earth oxide<br>(Na <sub>2</sub> O+K <sub>2</sub> O+CaO+ MgO+BaO) content less or equal to<br>18 % by weight] | -  | -  |
| <i>O</i> -hexyl- <i>N</i> -ethoxycarbonylthiocarbamate   | 432-750-3  | -  |
| (4-ethoxyphenyl)(3-(4-fluoro-3-<br>phenoxyphenyl)propyl)dimethylsilane   | 405-020-7  | 105024-66-6  |
| reaction mass of of: dimethyl (2-<br>(hydroxymethylcarbamoyl)ethyl)phosphonate;<br>diethyl (2-<br>(hydroxymethylcarbamoyl)ethyl)phosphonate;<br>methyl ethyl (2-<br>(hydroxymethylcarbamoyl)ethyl)phosphonate  | 435-960-3  | -  |
| (4-phenylbutyl)phosphinic acid   | 420-450-5  | 86552-32-1   |
| potassium titanium oxide (K <sub>2</sub> Ti <sub>6</sub> O <sub>13</sub> )   | 432-240-0  | 12056-51-8   |
| nickel matte   | 273-749-6  | 69012-50-6   |
| slimes and sludges, copper electrolytic refining,<br>decopperised, nickel sulfate  | 295-859-3  | 92129-57-2   |
| slimes and sludges, copper electrolyte refining,<br>decopperised   | 305-433-1  | 94551-87-8   |
| nickel diperchlorate;<br>perchloric acid, nickel(II) salt  | 237-124-1  | 13637-71-3   |
| nickel dipotassium bis(sulfate); [1]<br>diammonium nickel bis(sulfate) [2]   | 237-563-9 [1]<br>239-793-2 [2]                                   | 13842-46-1 [1]<br>15699-18-0 [2]                                     |
| nickel bis(sulfamidate);<br>nickel sulfamate   | 237-396-1  | 13770-89-3   |
| nickel bis(tetrafluoroborate)  | 238-753-4  | 14708-14-6   |
| nickel diformate; [1]<br>formic acid, nickel salt; [2]<br>formic acid, copper nickel salt [3]  | 222-101-0 [1]<br>239-946-6 [2]<br>268-755-0 [3]                  | 3349-06-2 [1]<br>15843-02-4 [2]<br>68134-59-8 [3]                    |
| nickel di(acetate); [1]<br>nickel acetate [2]  | 206-761-7 [1]<br>239-086-1 [2]                                   | 373-02-4 [1]<br>14998-37-9 [2]                                       |

| <b>Chemical name</b>   | <b>EC No</b>                            | <b>CAS No</b>                                      |
|--|---|--|
| nickel dibenzoate  | 209-046-8                               | 553-71-9   |
| nickel bis(4-cyclohexylbutyrate)   | 223-463-2                               | 3906-55-6  |
| nickel(II) stearate;<br>nickel(II) octadecanoate                           | 218-744-1                               | 2223-95-2  |
| nickel dilactate   | -                                       | 16039-61-5   |
| nickel(II) octanoate   | 225-656-7                               | 4995-91-9  |
| nickel difluoride; [1]   | 233-071-3 [1]                           | 10028-18-9 [1]                                     |
| nickel dibromide; [2]  | 236-665-0 [2]                           | 13462-88-9 [2]                                     |
| nickel diiodide; [3]   | 236-666-6 [3]                           | 13462-90-3 [3]                                     |
| nickel potassium fluoride [4]  | - [4]                                   | 11132-10-8 [4]                                     |
| nickel hexafluorosilicate  | 247-430-7                               | 26043-11-8   |
| nickel selenate  | 239-125-2                               | 15060-62-5   |
| nickel hydrogen phosphate; [1]   | 238-278-2 [1]                           | 14332-34-4 [1]                                     |
| nickel bis(dihydrogen phosphate); [2]                                      | 242-522-3 [2]                           | 18718-11-1 [2]                                     |
| trinickel bis(orthophosphate); [3]   | 233-844-5 [3]                           | 10381-36-9 [3]                                     |
| dinickel diphosphate; [4]  | 238-426-6 [4]                           | 14448-18-1 [4]                                     |
| nickel bis(phosphinate); [5]   | 238-511-8 [5]                           | 14507-36-9 [5]                                     |
| nickel phosphinate; [6]  | 252-840-4 [6]                           | 36026-88-7 [6]                                     |
| phosphoric acid, calcium nickel salt; [7]                                  | - [7]                                   | 17169-61-8 [7]                                     |
| diphosphoric acid, nickel(II) salt [8]                                     | - [8]                                   | 19372-20-4 [8]                                     |
| diammonium nickel hexacyanoferrate   | -                                       | 74195-78-1   |
| nickel dicyanide   | 209-160-8                               | 557-19-7   |
| nickel chromate  | 238-766-5                               | 14721-18-7   |
| nickel(II) silicate; [1]   | 244-578-4 [1]                           | 21784-78-1 [1]                                     |
| dinickel orthosilicate; [2]  | 237-411-1 [2]                           | 13775-54-7 [2]                                     |
| nickel silicate (3:4); [3]   | 250-788-7 [3]                           | 31748-25-1 [3]                                     |
| silicic acid, nickel salt; [4]   | 253-461-7 [4]                           | 37321-15-6 [4]                                     |
| trihydrogen hydroxybis[orthosilicato(4-)]trinickelate(3-)<br>[5]           | 235-688-3 [5]                           | 12519-85-6 [5]                                     |
| dinickel hexacyanoferrate  | 238-946-3                               | 14874-78-3   |
| trinickel bis(arsenate);<br>nickel(II) arsenate                            | 236-771-7                               | 13477-70-8   |
| nickel oxalate; [1]  | 208-933-7 [1]                           | 547-67-1 [1]                                       |
| oxalic acid, nickel salt [2]   | 243-867-2 [2]                           | 20543-06-0 [2]                                     |
| nickel telluride   | 235-260-6                               | 12142-88-0   |
| trinickel tetrasulfide   | -                                       | 12137-12-1   |
| trinickel bis(arsenite)  | -                                       | 74646-29-0   |
| cobalt nickel gray periclase;<br>C.I. Pigment Black 25;<br>C.I. 77332; [1] | 269-051-6 [1]<br>261-346-8 [2]<br>- [3] | 68186-89-0 [1]<br>58591-45-0 [2]<br>12737-30-3 [3] |
| cobalt nickel dioxide; [2]   |   |  |
| cobalt nickel oxide [3]  |   |  |
| nickel tin trioxide;<br>nickel stannate                                    | 234-824-9                               | 12035-38-0   |
| nickel triuranium decaoxide  | 239-876-6                               | 15780-33-3   |
| nickel dithiocyanate   | 237-205-1                               | 13689-92-4   |
| nickel dichromate  | 239-646-5                               | 15586-38-6   |
| nickel(II) selenite  | 233-263-7                               | 10101-96-9   |
| nickel selenide  | 215-216-2                               | 1314-05-2  |
| silicic acid, lead nickel salt   | -                                       | 68130-19-8   |
| nickel diarsenide; [1]   | 235-103-1 [1]                           | 12068-61-0 [1]                                     |
| nickel arsenide [2]  | 248-169-1 [2]                           | 27016-75-7 [2]                                     |

| <b>Chemical name</b>  | <b>EC No</b>  | <b>CAS No</b>   |
|---|---|---|
| nickel barium titanium primrose priderite;<br>C.I. Pigment Yellow 157;<br>C.I. 77900  | 271-853-6   | 68610-24-2  |
| nickel dichlorate; [1]<br>nickel dibromate; [2]<br>ethyl hydrogen sulfate, nickel(II) salt [3]  | 267-897-0 [1]<br>238-596-1 [2]<br>275-897-7 [3]   | 67952-43-6 [1]<br>14550-87-9 [2]<br>71720-48-4 [3]  |
| nickel(II) trifluoroacetate; [1]<br>nickel(II) propionate; [2]<br>nickel bis(benzenesulfonate); [3]<br>nickel(II) hydrogen citrate; [4]<br>citric acid, ammonium nickel salt; [5]<br>citric acid, nickel salt; [6]<br>nickel bis(2-ethylhexanoate); [7]<br>2-ethylhexanoic acid, nickel salt; [8]<br>dimethylhexanoic acid nickel salt; [9]<br>nickel(II) isooctanoate; [10]<br>nickel isooctanoate; [11]<br>nickel bis(isononanoate); [12]<br>nickel(II) neononanoate; [13]<br>nickel(II) isodecanoate; [14]<br>nickel(II) neodecanoate; [15]<br>neodecanoic acid, nickel salt; [16]<br>nickel(II) neoundecanoate; [17]<br>bis(D-gluconato- <i>O</i> <sup>1</sup> , <i>O</i> <sup>2</sup> )nickel; [18]<br>nickel 3,5-bis( <i>tert</i> -butyl)-4-hydroxybenzoate (1:2); [19]<br>nickel(II) palmitate; [20]<br>(2-ethylhexanoato- <i>O</i> )(isononanoato- <i>O</i> )nickel; [21]<br>(isononanoato- <i>O</i> )(isooctanoato- <i>O</i> )nickel; [22]<br>(isooctanoato- <i>O</i> )(neodecanoato- <i>O</i> )nickel; [23]<br>(2-ethylhexanoato- <i>O</i> )(isodecanoato- <i>O</i> )nickel; [24]<br>(2-ethylhexanoato- <i>O</i> )(neodecanoato- <i>O</i> )nickel; [25]<br>(isodecanoato- <i>O</i> )(isooctanoato- <i>O</i> )nickel; [26]<br>(isodecanoato- <i>O</i> )(isononanoato- <i>O</i> )nickel; [27]<br>(isononanoato- <i>O</i> )(neodecanoato- <i>O</i> )nickel; [28]<br>fatty acids, C <sub>6-19</sub> -branched, nickel salts; [29]<br>fatty acids, C <sub>8-18</sub> and C <sub>18</sub> -unsaturated, nickel salts; [30]<br>2,7-naphthalenedisulfonic acid, nickel(II) salt; [31] | 240-235-8 [1]<br>222-102-6 [2]<br>254-642-3 [3]<br>242-533-3 [4]<br>242-161-1 [5]<br>245-119-0 [6]<br>224-699-9 [7]<br>231-480-1 [8]<br>301-323-2 [9]<br>249-555-2 [10]<br>248-585-3 [11]<br>284-349-6 [12]<br>300-094-6 [13]<br>287-468-1 [14]<br>287-469-7 [15]<br>257-447-1 [16]<br>300-093-0 [17]<br>276-205-6 [18]<br>258-051-1 [19]<br>237-138-8 [20]<br>287-470-2 [21]<br>287-471-8 [22]<br>284-347-5 [23]<br>284-351-7 [24]<br>285-698-7 [25]<br>285-909-2 [26]<br>284-348-0 [27]<br>287-592-6 [28]<br>294-302-1 [29]<br>283-972-0 [30]<br>- [31] | 16083-14-0 [1]<br>3349-08-4 [2]<br>39819-65-3 [3]<br>18721-51-2 [4]<br>18283-82-4 [5]<br>22605-92-1 [6]<br>4454-16-4 [7]<br>7580-31-6 [8]<br>93983-68-7 [9]<br>29317-63-3 [10]<br>27637-46-3 [11]<br>84852-37-9 [12]<br>93920-10-6 [13]<br>85508-43-6 [14]<br>85508-44-7 [15]<br>51818-56-5 [16]<br>93920-09-3 [17]<br>71957-07-8 [18]<br>52625-25-9 [19]<br>13654-40-5 [20]<br>85508-45-8 [21]<br>85508-46-9 [22]<br>84852-35-7 [23]<br>84852-39-1 [24]<br>85135-77-9 [25]<br>85166-19-4 [26]<br>84852-36-8 [27]<br>85551-28-6 [28]<br>91697-41-5 [29]<br>84776-45-4 [30]<br>72319-19-8 [31] |
| nickel(II) sulfite; [1]<br>nickel tellurium trioxide; [2]<br>nickel tellurium tetroxide; [3]<br>molybdenum nickel hydroxide oxide phosphate [4]   | 231-827-7 [1]<br>239-967-0 [2]<br>239-974-9 [3]<br>268-585-7 [4]  | 7757-95-1 [1]<br>15851-52-2 [2]<br>15852-21-8 [3]<br>68130-36-9 [4]   |
| nickel boride (NiB); [1]<br>dinickel boride; [2]<br>trinickel boride; [3]<br>nickel boride; [4]<br>dinickel silicide; [5]<br>nickel disilicide; [6]<br>dinickel phosphide; [7]<br>nickel boron phosphide [8]  | 234-493-0 [1]<br>234-494-6 [2]<br>234-495-1 [3]<br>235-723-2 [4]<br>235-033-1 [5]<br>235-379-3 [6]<br>234-828-0 [7]<br>- [8]  | 12007-00-0 [1]<br>12007-01-1 [2]<br>12007-02-2 [3]<br>12619-90-8 [4]<br>12059-14-2 [5]<br>12201-89-7 [6]<br>12035-64-2 [7]<br>65229-23-4 [8]  |

| Chemical name  | EC No                          | CAS No                           |
|--|--------------------------------|----------------------------------|
| dialuminium nickel tetraoxide; [1]   | 234-454-8 [1]                  | 12004-35-2 [1]                   |
| nickel titanium trioxide; [2]  | 234-825-4 [2]                  | 12035-39-1 [2]                   |
| nickel titanium oxide; [3]   | 235-752-0 [3]                  | 12653-76-8 [3]                   |
| nickel divanadium hexaoxide; [4]   | 257-970-5 [4]                  | 52502-12-2 [4]                   |
| cobalt dimolybdenum nickel octaoxide; [5]  | 268-169-5 [5]                  | 68016-03-5 [5]                   |
| nickel zirkonium trioxide; [6]   | 274-755-1 [6]                  | 70692-93-2 [6]                   |
| molybdenum nickel tetraoxide; [7]  | 238-034-5 [7]                  | 14177-55-0 [7]                   |
| nickel tungsten tetraoxide; [8]  | 238-032-4 [8]                  | 14177-51-6 [8]                   |
| olivine, nickel green; [9]   | 271-112-7 [9]                  | 68515-84-4 [9]                   |
| lithium nickel dioxide; [10]   | - [10]                         | 12031-65-1 [10]                  |
| molybdenum nickel oxide; [11]  | - [11]                         | 12673-58-4 [11]                  |
| cobalt lithium nickel oxide  | 442-750-5                      | -                                |
| 2,3-epoxypropyltrimethylammonium chloride ...%;<br>glycidyl trimethylammonium chloride ...%  | 221-221-0                      | 3033-77-0                        |
| 1-(2-amino-5-chlorophenyl)-2,2,2-trifluoro-1,1-ethanediol, hydrochloride;<br>[containing $\geq 0.1$ % 4-chloroaniline (EC No 203-401-0)]   | 433-580-2                      | 214353-17-0                      |
| 4,4'-(1,3-phenylene-bis(1-methylethylidene))bis-phenol   | 428-970-4                      | 13595-25-0                       |
| chloro-1-ethylcyclohexyl carbonate   | 444-950-8                      | 99464-83-2                       |
| 2-chloro-6-fluoro-phenol   | 433-890-8                      | 2040-90-6                        |
| 2-methyl-5- <i>tert</i> -butylthiophenol   | 444-970-7                      | -                                |
| cyclic 3-(1,2-ethanediylacetale)-estra-5(10),9(11)-diene-3,17-dione  | 427-230-8                      | 5571-36-8                        |
| androsta-1,4,9(11)-triene-3,17-dione   | 433-560-3                      | 15375-21-0                       |
| 2-ethylhexyl-2-ethylhexanoate  | 231-057-1                      | 7425-14-1                        |
| perfluorooctane sulfonic acid;<br>heptadecafluorooctane-1-sulfonic acid; [1]   | 217-179-8 [1]<br>220-527-1 [2] | 1763-23-1 [1]<br>2795-39-3 [2]   |
| potassium perfluorooctanesulfonate;<br>potassium heptadecafluorooctane-1-sulfonate; [2]  | 274-460-8 [3]<br>249-415-0 [4] | 70225-14-8 [3]<br>29081-56-9 [4] |
| diethanolamine perfluorooctane sulfonate; [3]  | 249-644-6 [5]                  | 29457-72-5 [5]                   |
| ammonium perfluorooctane sulfonate;<br>ammonium heptadecafluorooctanesulfonate; [4]  |                                |                                  |
| lithium perfluorooctane sulfonate;<br>lithium heptadecafluorooctanesulfonate [5]   |                                |                                  |
| ethyl 1-(2,4-dichlorophenyl)-5-(trichloromethyl)-1 <i>H</i> -1,2,4-triazole-3-carboxylate  | 401-290-5                      | 103112-35-2                      |
| 1-bromo-2-methylpropyl propionate  | 422-900-6                      | 158894-67-8                      |
| triammonium 4-[4-[7-(4-carboxylatoanilino)-1-hydroxy-3-sulfonato-2-naphthylazo]-2,5-dimethoxyphenylazo]benzoate  | 432-270-4                      | 221354-37-6                      |
| reaction mass of: triammonium 6-amino-3-((2,5-diethoxy-4-(3-phosphonophenyl)azo)phenyl)azo-4-hydroxy-2-naphthalenesulfonate;<br>diammonium 3-((4-((7-amino-1-hydroxy-3-sulfonaphthalen-2-yl)azo)-2,5-diethoxyphenyl)azo)benzoate | 438-310-7                      | -                                |
| (3-chloro-2-hydroxypropyl) trimethylammonium chloride ...%   | 222-048-3                      | 3327-22-8                        |
| biphenyl-3,3',4,4'-tetrayltetraamine;<br>diaminobenzidine  | 202-110-6                      | 91-95-2                          |
| piperazine hydrochloride; [1]  | 228-042-7 [1]                  | 6094-40-2 [1]                    |
| piperazine dihydrochloride; [2]  | 205-551-2 [2]                  | 142-64-3 [2]                     |
| piperazine phosphate [3]   | 217-775-8 [3]                  | 1951-97-9 [3]                    |
| 3-(piperazin-1-yl)-benzo[d]isothiazole hydrochloride   | 421-310-6                      | 87691-88-1                       |

| Chemical name  | EC No     | CAS No      |
|--|-----------|-------------|
| (2-chloroethyl)(3-hydroxypropyl)ammonium chloride  | 429-740-6 | 40722-80-3  |
| 4-[(3-chlorophenyl)(1 <i>H</i> -imidazol-1-yl)methyl]-1,2-benzenediamine dihydrochloride   | 425-030-5 | 159939-85-2 |
| chloro- <i>N,N</i> -dimethylformiminium chloride   | 425-970-6 | 3724-43-4   |
| 7-methoxy-6-(3-morpholin-4-yl-propoxy)-3 <i>H</i> -quinazolin-4-one;<br>[containing ≥ 0.5 % formamide (EC No 200-842-0) ]  | 429-400-7 | 199327-61-2 |
| reaction products of diisopropanolamine with formaldehyde (1:4)  | 432-440-8 | 220444-73-5 |
| 3-chloro-4-(3-fluorobenzyloxy)aniline  | 445-590-4 | 202197-26-0 |
| ethidium bromide;<br>3,8-diamino-1-ethyl-6-phenylphenantridinium bromide   | 214-984-6 | 1239-45-8   |
| ( <i>R,S</i> )-2-amino-3,3-dimethylbutane amide  | 447-860-7 | 144177-62-8 |
| 3-amino-9-ethyl carbazole;<br>9-ethylcarbazol-3-ylamine  | 205-057-7 | 132-32-1    |
| tetrahydro-1,3-dimethyl-1 <i>H</i> -pyrimidin-2-one;<br>dimethyl propyleneurea   | 230-625-6 | 7226-23-5   |
| quinoline  | 202-051-6 | 91-22-5     |
| ketoconazole;<br>1-[4-[4-[[ <i>(2SR,4RS)</i> ]-2-(2,4-dichlorophenyl)-2-(imidazol-1-ylmethyl)-1,3-dioxolan-4-yl]methoxy]phenyl]piperazin-1-yl]ethanone   | 265-667-4 | 65277-42-1  |
| metconazole (ISO);<br>( <i>1RS,5RS;1RS,5SR</i> )-5-(4-chlorobenzyl)-2,2-dimethyl-1-(1 <i>H</i> -1,2,4-triazol-1-ylmethyl)cyclopentanol   | -         | 125116-23-6 |
| potassium 1-methyl-3-morpholinocarbonyl-4-[3-(1-methyl-3-morpholinocarbonyl-5-oxo-2-pyrazolin-4-ylidene)-1-propenyl]pyrazole-5-olate;<br>[containing ≥ 0.5 % <i>N,N</i> -dimethylformamide (EC No 200-679-5)]  | 418-260-2 | 183196-57-8 |
| <i>N,N',N''</i> -tris(2-methyl-2,3-epoxypropyl)-perhydro-2,4,6-oxo-1,3,5-triazine  | 435-010-8 | 26157-73-3  |
| trimethylpropane tri(3-aziridinylpropanoate);<br>(TAZ)   | 257-765-0 | 52234-82-9  |
| dimoxystrobin (ISO);<br>( <i>E</i> )-2-(methoxyimino)- <i>N</i> -methyl-2-[α-(2,5-xylyloxy)- <i>o</i> -tolyl]acetamide   | -         | 149961-52-4 |
| <i>N,N</i> -(dimethylamino)thioacetamide hydrochloride   | 435-470-1 | 27366-72-9  |
| reaction mass of: 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[ <i>N</i> -(2,4-dimethylphenyl)]-3-oxo-butanamide;<br>2-[[3,3'-dichloro-4'-[[1[[2,4-dimethylphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]azo]- <i>N</i> -(2-methylphenyl)-3-oxo-butanamide;<br>2-[[3,3'-dichloro-4'-[[1[[2,4-dimethylphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]azo]- <i>N</i> -(2-carboxylphenyl)-3-oxo-butanamide | 434-330-5 | -           |
| 6,6'-bis(diazo-5,5',6,6'-tetrahydro-5,5'-dioxo)[methylene-bis(5-(6-diazo-5,6-dihydro-5-oxo-1-naphthylsulfonyloxy)-6-methyl-2-phenylene)]di(naphthalene-1-sulfonate)  | 441-550-5 |             |

| <b>Chemical name</b>       | <b>EC No</b> | <b>CAS No</b> |
|----------------------------|--------------|---------------|
| dibutyltin hydrogen borate | 401-040-5    | 75113-37-0    |