

5 September 2018

Prioritisation assessment results of the Candidate List substances assessed - Substances included in the Candidate List by January 2018 and not yet recommended for inclusion in Annex XIV

The table below presents the results of the priority assessment of the Candidate List substances. The table serves as a basis for the selection of substances by ECHA when preparing the recommendation for inclusion of substances in Annex XIV: substances with highest priority are recommended before substances with lower priority. The table therefore also allows a view on how a specific not yet recommended substance ranks among the other substances on the Candidate List (and when its recommendation might be anticipated).

The table is prepared about once a year. After finalising the recommendation an updated version is provided on those substances that were recommended.

The substances assessed are all substances included in the Candidate List, except those already recommended and those added to the Candidate List in the most recent update (i.e. June 2018- these will always be considered in the following prioritisation round).

The substances are assessed against the criteria set out in Article 58(3) of REACH applying the general approach for prioritisation of SVHCs for inclusion in the Authorisation List. This approach as well as some examples how it has been implemented are available on ECHA's website (recommendation page).

Registration data is the main source of information used for priority setting. In addition, relevant information from downstream user reports, PPORD and Substance-in-Articles notifications is also taken into account. Furthermore, information from Annex XV SVHC reports of the substances or information received during the public consultation on the SVHC identification is also taken into account, where relevant. The substances for which no registration has been received by ECHA or that are only registered for intermediate uses (in accordance with Articles 17 and 18 of REACH) did not undergo a detailed assessment in this prioritisation round as their priority appears to be lower in comparison with the remaining substances in the Candidate List. However, potential grouping is considered.

The current version of the table is based on information provided as of **1 February 2018**.

The substances are listed in a descending order according to their total priority score based on the three criteria set out in Article 58(3). The conclusion column refers to ECHA's decision with regard to the inclusion of the substance in the draft 9th recommendation. Substances proposed for inclusion in the 9th draft recommendation are highlighted in colour, substances considered as one group are highlighted by the same colour.

When recommending substances ECHA considers the substances scoring the highest or having the potential to be grouped with those highest scoring substances or with substances already recommended or included in Annex XIV. The number of substances included in each recommendation needs to reflect the capacity of ECHA and the Commission to handle applications in the time provided for as well as the workability and practicality for applicants preparing their applications for authorisation.

Substance	EC no.	CAS no.	Registration status YES/INT/NO (INT=only intermediate registrations)	Scores			Verbal description			Total score (range)	Total score (middle value)	Further considerations (grouping, other)	Conclusion
				Inherent properties	Volumes	Wide-dispersive use	Inherent properties	Volumes	Wide-dispersive use				
4,4'-isopropylidenediphenol (bisphenol A)	201-245-8	80-05-7	YES	7	12	10	Toxic for reproduction (Article 57 c); Endocrine disrupting properties for human health and the environment (Article 57f)	The amount of 4,4'-isopropylidenediphenol (bisphenol A) manufactured and/or imported into the EU is according to registration data above 1,000,000 t/y. Part of the tonnage reported in registrations relates to the monomer imported as part of polymers and is therefore not considered for priority assessment. Some uses appear not to be in the scope of authorisation, such as uses as intermediate (in e.g. the manufacture of polycarbonate, epoxy resins, coating materials, substances or polymers) and to the extent it falls under the generic exemptions from authorisation requirement uses as laboratory reagent. Based on the registration information on volumes provided for most of these uses, the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of 4,4'-isopropylidenediphenol (bisphenol A) in the scope of authorisation include uses at industrial sites (formulation and use of epoxy resin hardeners) and uses by professional workers (e.g. use of epoxy resin hardeners). [score 10] The substance is reported for use in the production of various types of articles, however this seems not to be relevant for the WDU assessment: For thermal paper, the use will be limited to concentrations <0.02% by 2020 due to a restriction (entry no. 66 of REACH Annex XVII). In epoxy resin articles cured with bisphenol A containing hardeners the substance seems to react and releases are considered unlikely. It is noted that some uses are reported by members of the joint registration, which are not (any more) covered by the joint CSR of the lead registrant (e.g. industrial and professional use as anti-oxidant for processing PVC, production and recycling of thermal paper). Therefore, these uses were not considered for priority assessment.	29	29	Restriction (REACH): The placing on the market of thermal paper containing BPA in concentration of ≥0.02% by weight is restricted after January 2020. Regulation on plastic and food contact materials BPA is permitted for use in food contact materials in the EU under Regulation (EU) 10/2011 (amended by Regulation (EU) 2018/213) relating to plastic materials and articles intending to come into contact with foodstuff. However, there are prohibitions on the use of BPA in certain food contact materials e.g. for the manufacture of polycarbonate baby bottles and infant 'sippy' cups. EFSA is currently re-evaluating the risks to public health related to the presence of BPA in foodstuffs.	On the basis of Art. 58(3) prioritisation criteria 4,4'-isopropylidenediphenol (bisphenol A) gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend 4,4'-isopropylidenediphenol (bisphenol A) for inclusion in Annex XIV.
1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus™")	-	-	YES	13	9	7	vPvB (Article 57e)	The amount of "Dechlorane Plus" manufactured and/or imported into the EU is according to registration data in the tonnage band of 100 to 1,000 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 - 1000 t/y.	According to the registration information, "Dechlorane Plus" is used at industrial sites as a flame retardant in adhesives/sealants and polymers. [initial score 5] Furthermore, the substance is used in articles in volumes > 10 t/y (e.g. computers, electronics, vehicle textiles). [refined score 7]	29	29	According to the information in the SVHC Annex XV report, Dechlorane Plus is a potential substitute for DecaBDE which is restricted and listed as POP under the Stockholm Convention.	On the basis of Art. 58(3) prioritisation criteria 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus™") gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus™") for inclusion in Annex XIV.
Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)	-	-	YES	7	6	15	Endocrine disrupting properties (Article 57(f) - environment)	The amount of reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) manufactured and/or imported into the EU is according to registration data in the range of 10-100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of RP-HP in the scope of authorisation include uses at industrial sites (e.g. formulation of lubricant additives, lubricants and greases, use in lubricants and greases in vehicles and machinery), uses by professional workers (e.g. in lubricants and greases in vehicles and machinery) and uses by consumers (e.g. in lubricants and greases in vehicles and machinery). [score 15]	28	28		On the basis of Art. 58(3) prioritisation criteria Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl) get priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl) for inclusion in Annex XIV.

Dioxobis(stearato)trilead	235-702-8	12578-12-0	YES	1	15	7	Toxic for reproduction (Article 57 c)	The amount of dioxobis(stearato)trilead manufactured and/or imported into the EU is according to registration data in the range 10,000 – 100,000 t/y. Part of that tonnage is directly exported after manufacture. All tonnage for use in the EU appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of dioxobis(stearato)trilead in the scope of authorisation include uses at industrial sites (use as stabiliser, PVC processing). [initial score 5]. Furthermore, according to registration data the substance is used in plastic articles in volumes > 10 t/y. [refined score 7].	23	23	Grouping with other lead substances that can be used as stabilisers in PVC. <u>Other further consideration:</u> The stabiliser sector had a voluntary commitment to replace lead-based stabilisers in all their formulations sold in the EU market by the end of 2015. According to Vinylplus progress reports 2016 and 2017, ESPA members (European Stabilisers Producers Association representing most of the registrants of lead compounds used as stabilisers) completed the replacement. The uses as stabiliser are however still reported in registration dossiers. Furthermore ECHA at the request of the Commission submitted a restriction dossier on lead compounds used as stabilisers in PVC in December 2016. RAC adopted its opinion in December 2017 and SEAC adopted its final opinion in March 2018. ECHA sent the combined opinion and supporting documentation to the Commission during April 2018 (https://www.echa.europa.eu/web/guest/previous-consultations-on-restriction-proposals/-/substance-rev/16119/term). The scope of the restriction is specific in that it will cover the placing on the market and use of PVC articles stabilised with lead compounds. The restriction and the voluntary commitment do not cover however the uses for export. Based on the information currently available it is unclear whether such uses for export currently take place and/or will continue in future. If the currently foreseen restriction will be adopted and unless the (full) volume currently in the registration dossiers is for uses for export the substance would get a (much) lower score.	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, Dioxobis(stearato)trilead gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend Dioxobis(stearato)trilead for inclusion in Annex XIV.
Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	YES	1	15	7	Toxic for reproduction (Article 57 c)	The amount of fatty acids, C16-18, lead salts manufactured and/or imported into the EU is according to registration data > 10,000 t/y. Part of the tonnage manufactured is directly exported outside EU. All the tonnage for use in the EU appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of fatty acids, C16-18, lead salts in the scope of authorisation include uses at industrial sites (use as stabiliser, PVC processing). [initial score 5] Furthermore, according to registration data the substance is used in plastic articles in volumes > 10t/y. [refined score 7]	23	23	Grouping with other lead substances that can be used as stabilisers in PVC. <u>Other further consideration:</u> The stabiliser sector had a voluntary commitment to replace lead-based stabilisers in all their formulations sold in the EU market by the end of 2015. According to Vinylplus progress reports 2016 and 2017, ESPA members (European Stabilisers Producers Association representing most of the registrants of lead compounds used as stabilisers) completed the replacement. The uses as stabiliser are however still reported in registration dossiers. Furthermore ECHA at the request of the Commission submitted a restriction dossier on lead compounds used as stabilisers in PVC in December 2016. RAC adopted its opinion in December 2017 and SEAC adopted its final opinion in March 2018. ECHA sent the combined opinion and supporting documentation to the Commission during April 2018 (https://www.echa.europa.eu/web/guest/previous-consultations-on-restriction-proposals/-/substance-rev/16119/term). The scope of the restriction is specific in that it will cover the placing on the market and use of PVC articles stabilised with lead compounds. The restriction and the voluntary commitment do not cover however the uses for export. Based on the information currently available it is unclear whether such uses for export currently take place and/or will continue in future. If the currently foreseen restriction will be adopted and unless the (full) volume currently in the registration dossiers is for uses for export the substance would get a (much) lower score.	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, Fatty acids, C16-18, lead salts gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend Fatty acids, C16-18, lead salts for inclusion in Annex XIV.
Trilead dioxide phosphonate	235-252-2	12141-20-7	YES	1	15	7	Toxic for reproduction (Article 57 c)	The amount of trilead dioxide phosphonate manufactured and/or imported into the EU is according to registration data in the range of 100,000 - 1,000,000 t/y. Part of the tonnage is directly exported after manufacture. All tonnage used in the EU appears to be in the scope of authorisation. Therefore, in conclusion, the volume of trilead dioxide phosphonate in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of trilead dioxide phosphonate in the scope of authorisation include uses at industrial sites (use as stabiliser, PVC processing, use in rubber production, use in the production of coatings and application of coatings for mirror backing). In addition, one comment received during the SVHC public consultation indicates a use in greases (anti-friction coating), assumed to be limited to industrial use. [initial score 5] Furthermore, according to registration data the substance is used in articles (e.g. plastic and rubber articles) in volumes > 10t/y. [refined score 7]	23	23	Grouping with other lead substances that can be used as stabilisers in PVC. <u>Other further consideration:</u> The stabiliser sector had a voluntary commitment to replace lead-based stabilisers in all their formulations sold in the EU market by the end of 2015. According to Vinylplus progress reports 2016 and 2017, ESPA members (European Stabilisers Producers Association representing most of the registrants of lead compounds used as stabilisers) completed the replacement. The uses as stabiliser are however still reported in registration dossiers. Furthermore ECHA at the request of the Commission submitted a restriction dossier on lead compounds used as stabilisers in PVC in December 2016. RAC adopted its opinion in December 2017 and SEAC adopted its final opinion in March 2018. ECHA sent the combined opinion and supporting documentation to the Commission during April 2018 (https://www.echa.europa.eu/web/guest/previous-consultations-on-restriction-proposals/-/substance-rev/16119/term). The scope of the restriction is specific in that it will cover the placing on the market and use of PVC articles stabilised with lead compounds. The restriction and the voluntary commitment do not cover however the uses for export. Based on the information currently available it is unclear whether such uses for export currently take place and/or will continue in future. If the currently foreseen restriction will be adopted and unless the volume currently reported in the registrations dossiers is for uses for export, the substance may get (much) lower score(s). This depends on the tonnage used in other applications than PVC (rubber production, mirror backing) (information currently not available).	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, Trilead dioxide phosphonate gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend Trilead dioxide phosphonate for inclusion in Annex XIV.

Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	-	YES (under the mono-constituent substances DOTE and MOTE respectively)	1	12	7	Toxic for reproduction (Article 57 c)	The amount of reaction mass of DOTE and MOTE manufactured and/or imported in the EU is, according to registration data, estimated to be > 1,000 t/y. Some registrants have made use of the option allowing the registration of individual constituents for multi-constituent substances and have submitted registration dossiers for DOTE and MOTE as individual substances. The European Tin Stabilisers Association (ETINSA) representing most of the registrants of DOTE and MOTE provided information to the authorities in 2013 indicating that DOTE and MOTE are used as multi-constituent substances in almost all of their applications (Annex XV SVHC report). All uses appear to be in the scope of authorisation, apart from the use in food packaging. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 1,000 - 10,000 t/y.	Registered uses of reaction mass of DOTE and MOTE in the scope of authorisation include uses at industrial sites (production of dry-blend of DOTE; production of dry-blend of MOTE; processing of polymers containing DOTE as a stabiliser through calendaring, extrusion, injection and low energy manipulation of plastic articles; processing of polymers containing MOTE as a stabiliser through calendaring, extrusion, injection and low energy manipulation of plastic articles) [initial score 5] Furthermore according to some registrations the substance is used in articles (plastic articles) in volumes > 10 t/y. [refined score 7]	20	20	Grouping with DOTE <u>Other further consideration:</u> In October 2017 Germany submitted a CLH dossier for DOTE, proposing to revise the current harmonised classification in Annex VI of the CLP Regulation related to the reproductive toxicity properties. The public consultation on the CLH proposal ended on 2 February 2018. The substance is scheduled for discussion at RAC in November 2018.	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, DOTE:MOTE reaction mass gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend reaction mass of DOTE and MOTE for inclusion in Annex XIV.
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	15571-58-1	YES	1	9-12	7	Toxic for reproduction (Article 57 c)	The amount of DOTE manufactured and/or imported into the EU is estimated to be > 1,000 t/y based on registration information. Registrants have made use of the option allowing the registration of individual constituents for multi-constituent substances and have submitted registration dossiers for DOTE and MOTE as individual substances. The European Tin Stabilisers Association (ETINSA) representing most of the registrants of DOTE provided information to the authorities in 2013 indicating that DOTE is not manufactured, imported or marketed as mono-constituent (Annex XV SVHC report) but only in reaction mass with MOTE. This could not be confirmed based on registration information. All uses appear to be in the scope of authorisation, apart from the possible use in food packaging (unknown tonnage). Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 - 10,000 t/y.	Registered uses of DOTE in the scope of authorisation include uses at industrial sites (e.g. production of dry-blend of DOTE; processing of polymers containing DOTE as a stabiliser through calendaring, extrusion, injection and low energy manipulation of plastic articles; reactive catalyst) [initial score 5] In previous registrations and other sources of information the substance was reported to be used in articles (plastic articles) in volumes > 10 t/y. All registrations have been updated in 2016 and the references to the use in articles have been removed, however, the information provided does not allow to reliably conclude that there is no use in articles anymore. [refined score 7]	17-20	19	Grouping with reaction mass of DOTE and MOTE <u>Other further consideration:</u> In October 2017 Germany submitted a CLH dossier for DOTE, proposing to revise the current harmonised classification in Annex VI of the CLP Regulation related to the reproductive toxicity properties. The public consultation on the CLH proposal ended on 2 February 2018. The substance is scheduled for discussion at RAC in November 2018.	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, DOTE gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend DOTE for inclusion in Annex XIV.
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	209-218-2	561-41-1	YES	1	6	12	Carcinogenic (Article 57a)	The amount of 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol with Michler's Ketone (MK) or Michler's Base (MB) ≥0.1% manufactured and/or imported into the EU is according to registration data in the range of 10-100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol with MK or MB ≥0.1% in the scope of authorisation include uses at industrial sites (formulation and end use of printing inks) and by professional workers (use of printing inks). [initial score 10] The substance is also used in printed articles. [refined score 12]	19	19		On the basis of Art. 58(3) prioritisation criteria 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] for inclusion in Annex XIV.
2-Methoxyethanol	203-713-7	109-86-4	YES	1	12	5	Toxic for reproduction (Article 57c)	The amount of 2-methoxyethanol manufactured and/or imported into the EU is according to registration data in the range of 1,000 - 10,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as intermediate in the manufacture of chemicals and use as laboratory chemical in scientific research and development. Based on the registration information on volumes corresponding to different uses of the substance, the volume in the scope of authorisation is estimated to be in the range of 1,000 - 10,000 t/y.	Registered uses of 2-methoxyethanol in the scope of authorisation include uses at industrial sites (formulation of mixtures, use as solvent, processing aid and extraction agent). [score 5]	18	18	Grouping with 2-ethoxyethanol	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, 2-methoxyethanol gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend 2-methoxyethanol for inclusion in Annex XIV.
Cadmium hydroxide	244-168-5	21041-95-2	YES	1	12	5	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium hydroxide manufactured and/or imported into the EU is according to registration data in the range of 1,000 -10,000 t/y. Some uses appear not to be in the scope of authorisation such as the use as laboratory reagent and the use as intermediate in the manufacture of other cadmium compounds. Based on the registration information on volumes corresponding to these uses the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of cadmium hydroxide in the scope of authorisation include uses at industrial sites (production of industrial batteries) [score 5] Furthermore, the substance is used in articles (use in industrial batteries). However, releases of the substance from these articles are considered negligible.	18	18	Potential grouping: with some other cadmium compounds	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium hydroxide is postponed. Consequently, it is proposed <u>NOI</u> to recommend cadmium hydroxide for inclusion in Annex XIV in this recommendation round.

Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry] (HHPA)	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149-00-3, 14166-21-3	YES	1	12	5	Respiratory sensitising properties (Article 57(f) - human health)	The amount of HHPA manufactured and/or imported into the EU according to registration data is >10,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate including use as a monomer in the manufacture of thermoplastics. Based on information on the volume corresponding to those uses from registrations and from public consultation, the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of HHPA in the scope of authorisation include uses at industrial sites (formulation of mixtures; hardener for epoxy resins; process regulator for polymer processes). [score 5]	18	18	Grouping with MHPA	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, HHPA gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend HHPA for inclusion in Annex XIV.
Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans-stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry] (MHPA)	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	YES	1	12	5	Respiratory sensitising properties (Article 57(f) - human health)	The amount of MHPA manufactured and/or imported into the EU according to registration data is in the range of 1,000 - <10,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as intermediate including use as a monomer in the manufacture of thermoplastics. The volume corresponding to those uses is not available from the registration dossiers. Commenting during the public consultation on the 7th draft Annex XIV recommendation, industry estimated the share of the total tonnage for use as a monomer to be roughly 10%. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of MHPA in the scope of authorisation include uses at industrial sites (e.g. formulation of mixtures; hardener for epoxy resins; process regulator for polymer processes). [score 5]	18	18	Grouping with HHPA	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, MHPA gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend MHPA for inclusion in Annex XIV.
Tetraethyllead	201-075-4	78-00-2	YES	1	12	5	Toxic for reproduction (Article 57 c)	The amount of tetraethyllead manufactured and/or imported into the EU is according to registration data in the range of 1,000 - <10,000 t/y. The substance seems to be primarily used in aviation fuels. Registration information refers to motor fuels, however, there is no further information on this use. The professional and consumer use of aviation gasoline (volume unknown) appears to be outside the scope of authorisation because the substance is present in the gasoline at a concentration below the specific concentration limit. Therefore, in the absence of additional information, the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of tetraethyllead in the scope of authorisation include uses at industrial sites (formulation of fuel additives and of fuels with additives). [score 5]	18	18		On the basis of Art. 58(3) prioritisation criteria Tetraethyllead gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend Tetraethyllead for inclusion in Annex XIV.
Lead styphnate	239-290-0	15245-44-0	YES	1	6	7-12	Toxic for reproduction (Article 57 c)	The amount of lead styphnate manufactured and/or imported in the EU is according to registration data in the range of 10 - 100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of lead styphnate in the scope of authorisation include uses at industrial sites (formulation as component of primer mixtures (explosives)). [initial score 5] Furthermore, according to information from the registration dossier, the substance is also used by professional workers in primer ammunition and pyrotechnic articles. According to the Annex XV SVHC dossier, based on the available information, it is estimated that firearm ammunition accounts for ca. 90% of total EU consumption (with sport/hunting ammunition representing the significant majority). Among the rest of the uses, the following tonnages/share of the tonnage are assumed (i) detonator and pyrotechnics: ca. 7% of overall EU production (military detonators and igniters having a higher tonnage share compared to civilian detonators) (ii) Powder Actuated Cartridges for Power Tools: ca 4% of the total tonnage manufactured in the EU. Other identified uses (e.g. Automotive Igniters, Cartridge Actuated Devices (CAD) Performance Arts Pyrotechnics, use in Shuttles and Satellites) are assumed to concern low or very low percentages. [refined score 7-12]	14-19	17	Potential grouping: with some other lead substances (CL) Other further consideration: ECHA at request of the Commission submitted in April 2017 a restriction dossier on the use of lead and lead compounds in gunshots over wetlands. RAC adopted its opinion in February 2018 and SEAC agreed its draft opinion in March 2018. Registered uses of lead styphnate appear not to be within the scope of the restriction. https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/17005/term	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead styphnate is postponed. Consequently, it is proposed NOT to recommend lead styphnate for inclusion in Annex XIV in this recommendation round.
Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	YES	1	6	10	Toxic for reproduction (Article 57 c)	The amount of pyrochlore, antimony lead yellow manufactured and/or imported into the EU is according to registration data in the range of 10 - <100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of pyrochlore, antimony lead yellow in the scope of authorisation include uses at industrial sites (formulation of mixtures and use as colouring agent/pigment in inks and glazings for decoration of ceramic articles) and uses by professional workers (use as colouring agent/pigment in inks and glazings for decoration of ceramic articles). [score 10] Furthermore, according to registrations the substance is used in articles (colouring agent and pigment in ceramic articles). However, it appears that the release of the substance from these articles might be negligible.	17	17	Potential grouping: with some other lead substances (CL) Grouping with orange lead based on indication that both substances can be used as pigment has been explored during the 6th Recommendation round. Information provided on the physico-chemical properties and respective types of applications of these substances during the public consultation led to the conclusion that there may not be sufficient reasons to group these substances on that basis.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of pyrochlore, antimony lead yellow is postponed. Consequently, it is proposed NOT to recommend pyrochlore, antimony lead yellow for inclusion in Annex XIV in this recommendation round.

Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	YES	1	9	7	Toxic for reproduction (Article 57 c)	The amount of sulfurous acid, lead salt, dibasic manufactured and/or imported in the EU is according to registration data in the range of 100 – 1,000 t/y. Part of the tonnage is directly exported after manufacture. All tonnage for use in the EU appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 – 1,000 t/y.	Registered uses of sulfurous acid, lead salt, dibasic in the scope of authorisation include uses at industrial sites (use as stabiliser, PVC processing, formulation and use of coatings/inks for mirror backing). [initial score 5] Furthermore, according to registrations the substance is used in articles (plastic articles, mirrors). [refined score 7]	17	17	Grouping with other lead substances that can be used as stabilisers in PVC. <u>Other further consideration:</u> The stabiliser sector had a voluntary commitment to replace lead-based stabilisers in all their formulations sold in the EU market by the end of 2015. According to Vinylplus progress reports 2016 and 2017, ESPA members (European Stabilisers Producers Association representing most of the registrants of lead compounds used as stabilisers) completed the replacement. The uses as stabiliser are however still reported in registration dossiers. Furthermore ECHA at the request of the Commission submitted a restriction dossier on lead compounds used as stabilisers in PVC in December 2016. RAC adopted its opinion in December 2017 and SEAC adopted its final opinion in March 2018. ECHA sent the combined opinion and supporting documentation to the Commission during April 2018 (https://www.echa.europa.eu/web/guest/previous-consultations-on-restriction-proposals/-/substance-rev/16119/term). The scope of the restriction is specific in that it will cover the placing on the market and use of PVC articles stabilised with lead compounds. The restriction and the voluntary commitment do not cover however the uses for export. Based on the information currently available it is unclear whether such uses for export currently take place and/or will continue in future. If the currently foreseen restriction will be adopted and unless the volume currently reported in the registrations dossiers is for uses for export, the substance would get a (much) lower score. (depending on the tonnage used in other applications than PVC). This depends on the tonnage used in other applications than PVC (mirror backing) (tonnage information currently not available).	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, Sulfurous acid, lead salt, dibasic gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend Sulfurous acid, lead salt, dibasic for inclusion in Annex XIV.
Cadmium	231-152-8	7440-43-9	YES	1	9	6	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium manufactured and/or imported into the EU according to registration data is in the range of 1,000 - <10,000 t/y. Some uses appear not to be in the scope of authorisation, such as the use as laboratory reagent and use as an intermediate in the production of other Cd compounds. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of cadmium in the scope of authorisation include uses at industrial sites (manufacture of brazing products, use of cadmium containing coatings, manufacture of soldering products, use of active powders for industrial batteries, use of cadmium based targets for PVD coating, use of Cd, Ag containing alloys for moderator bars). Dossier updates were received in 2015-2016. Professional uses of cadmium based brazing products and cadmium-based soldering products have been removed from the majority of the registrations. The lead registrant's CSR no longer supports these uses. The professional use of brazing products, if still happening in the EU, is expected to be limited to applications derogated from the existing restriction under Annex XVII (derogations apply to brazing fillers used in defence and aerospace applications and to brazing fillers used for safety reasons). No restriction appears to apply to the use of cadmium based soldering products and PVD/coating. Considering the above, it is assumed that there is no professional use of cadmium in the EU. The substance is used in articles (e.g. cadmium based brazing products, cadmium plated articles exempted from the restriction, cadmium-based soldering products, PVD/CVD coated articles). The assumed tonnage for the use in articles for which negligible release cannot be concluded is below 10 t/y. [refined score: 6]	16	16	Potential grouping: with some other cadmium compounds	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium is postponed. Consequently, it is proposed NOT to recommend cadmium for inclusion in Annex XIV in this recommendation round.
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7	YES	1	9	6	Toxic for reproduction (Article 57 c)	The amount of imidazolidine-2-thione (2-imidazoline-2-thiol) manufactured and/or imported into the EU is according to registration in the range of 100-1,000 t/y. All tonnage appears to be in the scope of authorisation. [initial score 5] Furthermore, the article service-life might be relevant (rubber articles and tyres). [refined score 6]	Registered uses of imidazolidine-2-thione (2-imidazoline-2-thiol) in the scope of authorisation include uses at industrial sites (e.g. formulation of masterbatches and use as a vulcanization agent in the production of rubber goods and tyres, formulation and use in anticorrosion products). In addition, according to information from the industry submitted during the SVHC public consultation the substance may be used in electroplating. [initial score 5] Furthermore, the article service-life might be relevant (rubber articles and tyres). [refined score 6]	16	16		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of imidazolidine-2-thione; (2-imidazoline-2-thiol) is postponed. Consequently, it is proposed NOT to recommend imidazolidine-2-thione; (2-imidazoline-2-thiol) for inclusion in Annex XIV in this recommendation round.
2-Ethoxyethanol	203-804-1	110-80-5	YES	1	6-9	7	Toxic for reproduction (Article 57c)	The amount of 2-ethoxyethanol manufactured and/or imported into the EU is according to registration data in the range 100 - 1,000 t/y. Most of the tonnage seems to be used as intermediate. The use as intermediate and the use as laboratory chemical in scientific research and development appear to be outside the scope of authorisation. Taking into account the volume corresponding to the above uses as reflected in registrations and the Annex XV SVHC report, the volume in the scope of authorisation is estimated to be in the range of 10 - 1,000 t/y.	Registered uses of 2-ethoxyethanol in the scope of authorisation include uses at industrial sites (e.g. formulation of mixtures, use as a solvent in manufacture of chemicals). [initial score 5] Furthermore, according to registration information the substance is used by professional workers (use as solvent) in volumes <10t/y. [refined score 7]	14-17	16	Grouping with 2-methoxyethanol	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, 2-ethoxyethanol gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend 2-ethoxyethanol for inclusion in Annex XIV.

Cadmium oxide	215-146-2	1306-19-0	YES	1	9	5	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium oxide manufactured and/or imported into the EU according to registration data is in the range of 1,000 - <10,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate. Based on information from registration dossiers on the volume corresponding to those uses, the volume in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of cadmium oxide in the scope of authorisation include uses at industrial sites (use as electrotechnical contact material and use as active material for industrial batteries). [score 5] Furthermore, the substance is used in articles with specific tonnages assigned to those uses, e.g. use in industrial batteries and in electrotechnical contact materials. However, releases of the substance from these articles are considered negligible.	15	15	Potential grouping: with some other cadmium compounds	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium oxide is postponed. Consequently, it is proposed NOT to recommend cadmium oxide for inclusion in Annex XIV in this recommendation round.
Hydrazine	206-114-9	302-01-2, 7803-57-8	YES	1	9	5	Carcinogenic (Article 57a)	The amount of hydrazine manufactured and/or imported into the EU is according to registration data >10,000 t/y. However part of this volume is directly exported, meaning the volume for uses in the EU is in the tonnage band 1,000 - <10,000 t/y. Some uses appear not to be in the scope of authorisation, such as the uses as monomer, intermediate and to the extent they fall under the generic exemptions from authorisation requirement some uses in scientific research and development (use as laboratory chemical, use for hot firing tests in the aerospace industry). End-uses in mixtures below the concentration limit of 0.1% are reported and appear not to be in scope of authorisation. However their upstream uses are considered in the scope. Based on information on the volume corresponding to those uses from the registration dossiers, the volume in the scope of authorisation is estimated to be in the tonnage band 100-1,000 t/y.	Registered uses of hydrazine in the scope of authorisation include uses at industrial sites such as formulation and repacking of substances or mixtures or use as reducing agent. The substance is also registered for uses in the aerospace industry (fuel for hot firing in space crafts/satellite propellant). [score 5]	15	15		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of hydrazine is postponed. Consequently, it is proposed NOT to recommend hydrazine for inclusion in Annex XIV in this recommendation round.
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	YES	1	9	5	Toxic for reproduction (Article 57 c)	The amount of EGDME manufactured and/or imported into the EU is, according to dossiers submitted by industry in the range of 100 - <1,000 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of EGDME in the scope of authorisation include uses at industrial sites (as solvent/process aid in the manufacture of fine/bulk chemicals and pharmaceuticals and in the production of batteries). [score 5] Furthermore, according to registrations, the substance is used in articles (solvent in [sealed] batteries). However, release of the substance from these articles are considered negligible.	15	15	Potential grouping: with Diglyme (4th A.XIV Recommendation) and TEGDME (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) is postponed. Consequently, it is proposed NOT to recommend 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) for inclusion in Annex XIV in this recommendation round.
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	YES	1	9	5	Toxic for reproduction (Article 57 c)	The amount of dinoseb manufactured and/or imported into the EU is according to registration data in the range of 100 - 1,000 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of dinoseb in the scope of authorisation include uses at industrial sites (use as polymerisation retarder). [score 5]	15	15		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Dinoseb (6-sec-butyl-2,4-dinitrophenol) is postponed. Consequently, it is proposed NOT to recommend Dinoseb (6-sec-butyl-2,4-dinitrophenol) for inclusion in Annex XIV in this recommendation round.
Lead titanium zirconium oxide	235-727-4	12626-81-2	YES	1	9	5	Toxic for reproduction (Article 57 c)	The amount of lead titanium zirconium oxide manufactured and/or imported into the EU is according to registration data in the range of 100 - <1,000 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of lead titanium zirconium oxide in the scope of authorisation include use at industrial sites (production of electro-ceramic components). [score 5] Furthermore, according to registrations the substance is used in articles (piezo-electric components in many electrical / electronic applications). However, it appears that the release of the substance from these articles might be negligible.	15	15	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead titanium zirconium oxide is postponed. Consequently, it is proposed NOT to recommend lead titanium zirconium oxide for inclusion in Annex XIV in this recommendation round.
4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	-	YES	7	0-9	0-5	Endocrine disrupting properties (Article 57(f) - environment)	The amount of 4-nonylphenol manufactured and/or imported into the EU is according to registration data in the range of 10,000 - 100,000 t/y. This tonnage has to be seen as minimum as there might be more registrations falling under the Candidate List entry. Based on registration information it appears that 4-nonylphenol is mostly used as an intermediate in the manufacture of epoxy resins (i.e. further reaction of phenol formaldehyde resins in the production of coatings/inks/adhesives etc.). It is not clear whether some of it is used as a non-intermediate, e.g. as a hardening accelerator in amine based epoxy resins used in adhesives. Therefore, the volume in the scope of authorisation is roughly estimated to be in the range of 0 - 1,000 t/y.	Based on the description of the uses provided in registrations of 4-nonylphenol, they all seem to be outside the scope of authorisation. [initial score 0]. However, for one of those uses (use in adhesives), there are some indications that there may be industrial or professional applications occurring in the EU which may be in the scope of authorisation. [refined score 0-5]	7-21	14	Potential grouping with other 4-alkylphenols on the CL	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] is postponed. Consequently, it is proposed NOT to recommend the substance for inclusion in Annex XIV in this recommendation round.

Formamide	200-842-0	75-12-7	YES	1	6	7	Toxic for reproduction (Article 57 c)	Most of the amount of formamide manufactured and/or imported into the EU is registered as intermediate. Some further uses appear not to be in the scope of authorisation, such as certain uses as laboratory chemicals (to the extent they fall under the generic exemptions from authorisation requirement). The remaining volume is in the range of 10 - 100 t/y. The exact part of this volume allocated to uses in the scope of authorisation is unclear. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10 - 100 t/y.	Registered uses of formamide in the scope of authorisation include uses at industrial sites (use as solvent) (Registrations and SVHC public consultation in 2012). However, industrial uses as solvent for analytical/quality purposes could fall under the exemption for scientific research and development. [initial score 5]. Furthermore, according to registrations the substance is used by professional workers in uses that fall under the scope of authorisation (as reagent chemicals) in volumes < 10 t/y. [refined score 7].	14	14		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of formamide is postponed. Consequently, it is proposed NOT to recommend formamide for inclusion in Annex XIV in this recommendation round.
Lead diazide, Lead azide	236-542-1	13424-46-9	YES	1	6	7	Toxic for reproduction (Article 57 c)	The amount of lead diazide manufactured and/or imported into the EU is according to registration data in the range of 10 - <100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of lead diazide in the scope of authorisation include uses at industrial sites (formulation and industrial use of primary explosives for use in detonators). [initial score 5] Furthermore, the detonators containing the primary explosives might potentially be used by professional workers. [refined score 7]	14	14	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead diazide, lead azide is postponed. Consequently, it is proposed NOT to recommend lead diazide, lead azide for inclusion in Annex XIV in this recommendation round.
Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	YES	1	6-9	5	Toxic for reproduction (Article 57 c)	The amount of lead (II) bis(methanesulfonate) manufactured and/or imported into the EU is according to registration data in the range of 10-1,000 t/y (it is noted that the latest year reported in the notifications is more than 10 years ago.) All tonnage appears to be in the scope of authorisation. Based on information from industry, the demand has fallen the last years due to the Restriction of Hazardous Substances Directive (RoHS) (SVHC public consultation).	Registered uses of lead (II) bis(methanesulfonate) in the scope of authorisation include uses at industrial sites (as additive for electroplating solutions mainly by electronics industry). [score 5]	12-15	14	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead (II) bis(methanesulfonate) is postponed. Consequently, it is proposed NOT to recommend lead (II) bis(methanesulfonate) for inclusion in Annex XIV in this recommendation round.
Lead dinitrate	233-245-9	10099-74-8	YES	1	6	7	Toxic for reproduction (Article 57 c)	The amount of lead dinitrate manufactured and/or imported into the EU is according to registration data in the range of >10 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in manufacture of chemicals and explosives and use as laboratory chemical in scientific research and development. Taking into account the volume corresponding to those uses based on information from registrations, the volume in the scope of authorisation is estimated to be in the range of 10 - <100 t/y.	Registered uses of lead dinitrate in the scope of authorisation include uses at industrial sites (formulation and use in products belonging to the following categories: 'coatings and paints, thinners, paint removers' and 'fillers, putties, plasters, modelling clay'; use as a non-intermediate in production of explosives, weapons and ammunition). Additionally, according to the information provided by industry, the substance may be used in precious metal recovery. [initial score 5] Furthermore, based on information in registrations, the substance may be used by professional workers in the production of explosives as a non-intermediate in volumes < 10 t/y. In addition, the substance is used in shotgun cartridges in volumes >10 t/y and may be used in articles produced during the uses listed above (e.g. use in coatings). [refined score 7]	14	14	Potential grouping: with some other lead substances (CL) <u>Other further consideration:</u> ECHA at request of the Commission submitted in April 2017 a restriction dossier on the use of lead and lead compounds in gunshots over wetlands. RAC adopted its opinion in February 2018 and SEAC agreed its draft opinion in March 2018. Registered uses of lead dinitrate appear not to be within the scope of the restriction. https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/17005/term	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead dinitrate is postponed. Consequently, it is proposed NOT to recommend lead dinitrate for inclusion in Annex XIV in this recommendation round.
Cadmium sulphide	215-147-8	1306-23-6	YES	1	6	5	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium sulphide manufactured and/or imported into the EU is according to registration data >10 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in the manufacture of other cadmium compounds and inorganic pigments and use as laboratory chemical in scientific research and development. However, the volume used as pigment in the production of frits, glass and ceramics is taken into account when allocating the volume score. It is recognized that the intermediate/non-intermediate status of this use is a complex issue, and it is also stressed that this prioritisation exercise is not taking a formal position whether certain uses of substances are regarded as uses as intermediates in accordance with the definition in Article 3(15). Taking into account the volume corresponding to those uses, based on the registration information, the volume in the scope of authorisation is estimated to be in the range of 10 - <100 t/y.	Registered uses of cadmium sulphide in the scope of authorisation include uses at industrial sites (e.g. use in production of photovoltaic modules, additive in production of electronic components). [score 5] Furthermore, the substance is used in articles (electronic components, opto-electronic equipment, photovoltaic modules). However it seems that the release from these articles might be negligible.	12	12	Potential grouping: with some other cadmium compounds	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium sulphide is postponed. Consequently, it is proposed NOT to recommend cadmium sulphide for inclusion in Annex XIV in this recommendation round.
Lead di(acetate)	206-104-4	301-04-2	YES	1	3-6	6	Toxic for reproduction (Article 57 c)	The amount of lead(di)acetate manufactured and/or imported into the EU is according to registration data above 0 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in manufacture of other substances and, to the extent the conditions for the generic exemption for the use in Scientific Research and Development are met, some uses as a laboratory chemical. Uncertainty exists as to whether one use claimed as intermediate indeed fulfils the intermediate definition (use of preparation in the purification of another substance). Taking into account the volume corresponding to those uses, the volume in the scope of authorisation is estimated to be in the range of >0 to 100 t/y.	Registered uses of lead(di)acetate in the scope of authorisation include uses at industrial sites (e.g. formulation and use in products belonging to the following categories: paints, coatings, thinners, paint removers / fillers, putties, plasters, modelling clay). In addition, according to the information from industry submitted during the SVHC public consultation (2013), the substance can also be used in the production of semiconductors. [initial score 5] Finally, some of the uses reported above may result in the substance ending up in articles in volumes < 10 t/y (painted articles etc). [refined score 6]	10-13	12	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead di(acetate) is postponed. Consequently, it is proposed NOT to recommend lead di(acetate) for inclusion in Annex XIV in this recommendation round.

1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of triglyme manufactured and/or imported into the EU is according to registration data in the range of 10-100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of triglyme in the scope of authorisation include uses at industrial sites (as solvent or process chemical; according to the A.XV report, used mainly in the fine chemicals sector, and also in absorbing liquids in the industrial cleaning of gases etc.). [score 5]	12	12	Potential grouping: with Diglyme (4th A.XIV Recommendation) and EGDME (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme) is postponed. Consequently, it is proposed NOT to recommend 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme) for inclusion in Annex XIV in this recommendation round.
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9	YES	1	6	5	Mutagenic (Article 57b)	The amount of 1,3,5-tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC) manufactured and/or imported into the EU is, according to registration data, in the range of 100 - 1,000 t/y. Some uses appear not to be in the scope of authorisation, such as uses as intermediate. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10 - 100 t/y.	Registered uses of 1,3,5-tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC) in the scope of authorisation comprise uses at industrial sites (curing agent in the formulation of powder coatings, solder mask inks, molding resins; manufacture and application of electronic adhesive tape) [score 5] The substance may also be used in articles (e.g. electronic adhesive tapes), however, it appears that the release of the substance from these articles might be negligible.	12	12	Potential grouping: with β-TGIC	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,3,5-tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC) is postponed. Consequently, it is proposed NOT to recommend 1,3,5-tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC) for inclusion in Annex XIV in this recommendation round.
Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of lead bis(tetrafluoroborate) manufactured and/or imported into the EU is, according to registration data, in the range of 10 - <100t/y. All the tonnage appears to be in the scope of authorisation.	Registered uses of lead bis(tetrafluoroborate) in the scope of authorisation include uses at industrial sites (formulation and use for automated and manual electrolytic lead plating). [score: 5]	12	12	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Lead bis(tetrafluoroborate) is postponed. Consequently, it is proposed NOT to recommend Lead bis(tetrafluoroborate) for inclusion in Annex XIV in this recommendation round.
Lead cyanamidate	244-073-9	20837-86-9	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of lead cyanamidate manufactured and/or imported into the EU is according to registration data in the range of 10 - <100 t/y. All tonnage appears to be in the scope of authorisation.	According to the available information from consultation with industry, uses of lead cyanamidate in the scope of authorisation include uses at industrial sites. [score 5]. Furthermore, according to the available information, the substance is used in articles. However, it appears that the release of the substance from these articles might be negligible.	12	12	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead cyanamidate is postponed. Consequently, it is proposed NOT to recommend lead cyanamidate for inclusion in Annex XIV in this recommendation round.
Lead titanium trioxide	235-038-9	12060-00-3	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of lead titanium trioxide manufactured and/or imported into the EU is according to registration data in the range of 10 - <100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of lead titanium trioxide in the scope of authorisation include uses at industrial sites (production of electrical ceramic parts and materials). [score 5] Furthermore, according to registrations the substance is used in articles (electrical ceramic parts and materials in machinery, mechanical appliances, electrical/electronic articles). However, it appears that the release of the substance from these articles might be negligible.	12	12	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead titanium trioxide is postponed. Consequently, it is proposed NOT to recommend lead titanium trioxide for inclusion in Annex XIV in this recommendation round.
Silicic acid (H ₂ SiO ₅), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD)]; the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]	272-271-5	68784-75-8	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of silicic acid, barium salt, lead doped manufactured and/or imported into the EU is according to registration data in the range of 10 - <100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of silicic acid, barium salt, lead doped in the scope of authorisation include uses at industrial sites (formulation of paints and coatings, use of coatings for glass lamps) [score 5]. Furthermore, according to registrations the substance is used in articles (coating in fluorescent lamps). However, it appears that the release of the substance from these articles might be negligible.	12	12	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of silicic acid, barium salt, lead doped is postponed. Consequently, it is proposed NOT to recommend silicic acid, barium salt, lead doped for inclusion in Annex XIV in this recommendation round.

[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (C.I. Basic Violet 3) [BV3]	208-953-6	548-62-9	YES	1	3	7	Carcinogenic (Article 57a)	The amount of C.I. Basic Violet 3 (BV3) with Michler's Ketone (MK) or Michler's Base (MB) ≥0.1% manufactured and/or imported into the EU is according to registration data in the range of 1-10 t/y. All registered tonnage appears to be in the scope of authorisation.	Registered uses of BV3 with MK or MB ≥0.1% in the scope of authorisation include uses at industrial sites (formulation of inks, production of printing cartridges and ball pens). [initial score 5] There may be uses by professional workers however it is uncertain if those would contain MK or MB ≥0.1%. Professional uses are not registered and stated as being not applicable for professionals. On the other hand, consumer uses of the above products have been registered, however uses of inks with BV3 (with the impurity profile specified above) ≥0.1% are considered to be banned for consumer use. Furthermore, the substance is assumed to be used in printed articles in volumes <10t/y. [refined score 7]	11	11	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of C.I. Basic Violet 3 (BV3) with Michler's Ketone (MK) or Michler's Base (MB) ≥0.1% is postponed. Consequently, it is proposed NOT to recommend C.I. Basic Violet 3 (BV3) with Michler's Ketone (MK) or Michler's Base (MB) ≥0.1% for inclusion in Annex XIV in this recommendation round.	
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	219-943-6	2580-56-5	YES	1	3	7	Carcinogenic (Article 57a)	The amount of C. I. Basic Blue 26 manufactured and/or imported into the EU is according to registration data in the range of 1-10 t/y, however it is unknown how much of this volume contains Michler's Ketone (MK) or Michler's Base (MB) in concentrations ≥0.1%. All registered tonnage appears to be in the scope of authorisation.	C. I. Basic Blue 26 is used in industrial sites in a wide range of uses as dye. [initial score 5] Furthermore, according to registration information the substance is used by professional workers, mainly for dyeing textiles, in a volume <10 t/y. The substance is reported to end up in articles (paper, textile, leather) in volume <10 t/y. [refined score 7]	11	11	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of [[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride is postponed. Consequently, it is proposed NOT to recommend [[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride for inclusion in Annex XIV in this recommendation round.	
[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	YES	1	0-6	7	Toxic for reproduction (Article 57 c)	The amount of [phthalato(2-)]dioxotrilead manufactured and/or imported into the EU is according to registration data in the range of 100 - 1,000 t/y. Part of the tonnage manufactured is directly exported outside EU. All the tonnage for use in the EU appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 0 - 100 t/y.	Registered uses of [phthalato(2-)]dioxotrilead in the scope of authorisation include uses at industrial sites (use as stabiliser, PVC processing). [initial score 5] Furthermore, according to registration data, the substance is used in plastic articles at unknown volumes. [refined score 7]	8-14	11	Grouping with other lead substances that can be used as stabilisers in PVC. <u>Other further consideration:</u> The stabiliser sector had a voluntary commitment to replace lead-based stabilisers in all their formulations sold in the EU market by the end of 2015. According to Vinylplus progress reports 2016 and 2017, ESPA members (European Stabilisers Producers Association representing most of the registrants of lead compounds used as stabilisers) completed the replacement. The uses as stabiliser are however still reported in registration dossiers. Furthermore ECHA at the request of the Commission submitted a restriction dossier on lead compounds used as stabilisers in PVC in December 2016. RAC adopted its opinion in December 2017 and SEAC adopted its final opinion in March 2018. ECHA sent the combined opinion and supporting documentation to the Commission during April 2018 (https://www.echa.europa.eu/web/guest/previous-consultations-on-restriction-proposals/-/substance-rev/16119/term). The scope of the restriction is specific in that it will cover the placing on the market and use of PVC articles stabilised with lead compounds. The restriction and the voluntary commitment do not cover however the uses for export. Based on the information currently available it is unclear whether such uses for export currently take place and/or will continue in future. If the currently foreseen restriction will be adopted and unless the (full) volume currently in the registration dossiers is for uses for export, the substance would get a (much) lower score.	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, [Phthalato(2-)]dioxotrilead gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend [Phthalato(2-)]dioxotrilead for inclusion in Annex XIV.
Acetic acid, lead salt, basic	257-175-3	51404-69-4	YES	1	3	7	Toxic for reproduction (Article 57 c)	The amount of acetic acid, lead salt, basic manufactured and/or imported into the EU is according to registration data >1 t/y. Some uses appear not to be in the scope of authorisation, such as use as intermediate in manufacture of chemicals and use as laboratory chemical in scientific research and development. Taking into account the volume corresponding to those uses, based on information from registrations, the volume in the scope of authorisation is estimated to be in the range of 1 - <10 t/y.	Registered uses of acetic acid, lead salt, basic in the scope of authorisation include uses at industrial sites (formulation and use in products belonging to the following categories: 'coatings and paints, thinners, paint removers', 'fillers, putties, plasters, modelling clay' and 'ph-regulators, flocculants, precipitants and neutralisation agents'). [initial score 5] Furthermore, according to information from the public consultation, the substance is also used in the production of primary explosives and in explosive detonators for defence applications. Therefore, professional use of the substance in explosive detonators could be assumed. The substance might also be used in articles resulting from the uses of paints, coatings, fillers, putties etc. [refined score 7]	11	11	Potential grouping: with some other lead substances (CL) Grouping with orange lead based on indication that both substances can be used in paints has been explored during the 6th recommendation round. Information provided during the public consultation on the functions of these substances in paints and on their water solubilities led to the conclusion that there may not be sufficient reasons to group these substances on that basis.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of acetic acid, lead salt, basic is postponed. Consequently, it is proposed NOT to recommend acetic acid, lead salt, basic for inclusion in Annex XIV in this recommendation round.

Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	YES	1	3	6	Toxic for reproduction (Article 57 c)	The amount of dibutyltin dichloride (DBTC) manufactured and/or imported into the EU is according to registration data >100 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in the manufacture of chemicals. Most of the total volume corresponds to those uses based on information from registrations. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be < 10 t/y.	Registered uses of dibutyltin dichloride (DBTC) in the scope of authorisation include uses at industrial sites (formulation in materials, additive in the production of rubber tyres). In addition, the substance might be used in adhesives at industrial sites based on information from industry provided during the SVHC public consultation, but it is not clear whether the concentration of the substance in these mixtures is above the generic concentration limit. [initial score 5]. Furthermore, according to registrations the substance is used in articles in volumes < 10 t/y (rubber tyres). [refined score 6]	10	10	Potential grouping with other tin-containing Candidate List substances (TBTO, DOTE, reaction mass of DOTE and MOTE)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of dibutyltin dichloride (DBTC) is postponed. Consequently, it is proposed NOT to recommend dibutyltin dichloride (DBTC) for inclusion in Annex XIV in this recommendation round.
Methyloxirane (Propylene oxide)	200-879-2	75-56-9	YES	1	3	5	Carcinogenic (Article 57a); Mutagenic (Article 57b)	The amount of methyloxirane manufactured and/or imported into the EU is according to registration data >1,000,000 t/y. Based on registration information it appears that the substance is mostly/only used for uses falling out of the scope of authorisation (use as intermediate in manufacturing of other substances, use as monomer in the manufacturing of polymers and, to the extent the conditions for the generic exemption for the use in Scientific Research and Development are met, use in laboratory). According to information from industry submitted during the SVHC public consultation, the substance is used as a processing aid in the manufacture of chemicals in very low volumes (<5 t/y). Taking into account the volume corresponding to those uses, based on information from registrations and further information, the volume in the scope of authorisation is estimated to be in the range of 1 - <10 t/y.	Registered uses of methyloxirane appear to fall outside the scope of authorisation. Information provided by industry during public consultation indicates that the substance is used at industrial sites as a processing aid in the manufacture of chemicals. [score 5]	9	9		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of methyloxirane (propylene oxide) is postponed. Consequently, it is proposed NOT to recommend methyloxirane (propylene oxide) for inclusion in Annex XIV in this recommendation round.
1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	423-400-0	59653-74-6	YES	1	3	5	Mutagenic (Article 57b)	The amount of 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC) manufactured and/or imported into the EU is, according to registration data, <10 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of <10 t/y.	Registered uses of 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC) in the scope of authorisation comprise uses at industrial sites (application of solder-resist inks). [score: 5]	9	9	Potential grouping: with TGIC	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC) is postponed. Consequently, it is proposed NOT to recommend 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC) for inclusion in Annex XIV in this recommendation round.
1,3-propanesultone	214-317-9	1120-71-4	YES	1	3	5	Carcinogenic (Article 57 a)	The amount of 1,3-propanesultone manufactured and/or imported into the EU is according to registration data > 1 t/y. The majority of the volume appears not to be used in the scope of authorisation, such as use as an intermediate in manufacture of other substances and use as a laboratory chemical in scientific research and development. Taking into account the volume corresponding to those uses the volume in the scope of authorisation is estimated to be in the range of <10 t/y.	Registered uses of 1,3-propanesultone in the scope of authorisation include uses at industrial sites (formulation of mixtures and use as additive for electrolysis). [score 5] Furthermore, according to registrations the substance is used in lithium-ion batteries (registered as professional use and consumer use of batteries), however these uses are considered use of an article (not a use of the substance). The article service life for use in batteries is also registered, however, releases of the substance from these articles are considered negligible.	9	9		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,3-propanesultone is postponed. Consequently, it is proposed NOT to recommend 1,3-propanesultone for inclusion in Annex XIV in this recommendation round.
4,4'-oxydianiline and its salts	202-977-0	101-80-4	YES	1	3	5	Carcinogenic (Article 57a); Mutagenic (Article 57b)	The amount of 4,4'-oxydianiline and its salts manufactured and/or imported into the EU is, according to registration data, above 10 t/y. The majority of the tonnage registered is related to import of monomer as part of polymers and is therefore not considered for priority assessment. A reported use as monomer is considered as use as intermediate. Therefore, in conclusion, the tonnage in the scope of authorisation is < 10 t/y.	Registered uses of 4,4'-oxydianiline and its salts in the scope of authorisation include uses at industrial sites (production of computer, electronic and optical products and electrical equipment). [score 5]	9	9		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 4,4'-oxydianiline is postponed. Consequently, it is proposed NOT to recommend 4,4'-oxydianiline for inclusion in Annex XIV in this recommendation round.
Phenolphthalein	201-004-7	77-09-8	YES	1	3	5	Carcinogenic (Article 57 a)	The amount of phenolphthalein manufactured and/or imported into the EU is according to registration data in the range of 10 – 100 t/y. Some uses appear not to be in the scope of authorisation such as the uses as laboratory chemical (to the extent they fall under the generic exemptions from authorisation requirement). Therefore, in conclusion, the volume in the scope of authorisation is estimated to be <10t/y.	Registered uses of phenolphthalein in the scope of authorisation include uses at industrial sites (use as processing aid in industrial manufacturing processes). [score 5]	9	9		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of phenolphthalein is postponed. Consequently, it is proposed NOT to recommend phenolphthalein for inclusion in Annex XIV in this recommendation round.

Trilead bis(carbonate) dihydroxide	215-290-6	1319-46-6	YES	1	3	5	Toxic for reproduction (Article 57 c)	<p>The amount of trilead bis(carbonate)dihydroxide manufactured and/or imported into the EU is, according to registration data, in the range of 10-100 t/y. All tonnage registered is used in the preparation of PTC (positive temperature coefficient) ceramic materials. This use appears to be an intermediate use and therefore not to be in the scope of authorisation. However, information from other sources indicates that there may be some minor uses in the scope of authorisation.</p> <p>Therefore, in conclusion, the volume in the scope of authorisation is estimated to be <10 t/y.</p>	<p>There is no registered use of trilead bis(carbonate)dihydroxide appearing to be in the scope of authorisation. [initial score 0]</p> <p>However, information arising from the SVHC public consultation indicates that the substance may be used as lead stabiliser in PVC and in the manufacture of primary explosives. In addition, further information provided by industry indicates that this substance was used in artists' paints. This use is derogated from the generic restriction on CMR substances used as substances or in mixtures sold to the general public. However, there is a specific entry on lead carbonates where intended for use as paint (entry no. 16 of REACH Annex XVII). Member States may permit on their territory the use of this substance in paints (for use in restoration and maintenance of works of art and historic buildings and their interiors) but given the nature of the restriction it is likely that this would be for professional use only. [refined score 5]</p>	9	9	<p>Grouping with other lead substances that can be used as stabilisers in PVC.</p> <p><u>Other further consideration:</u> ECHA at the request of the Commission submitted a restriction dossier on lead compounds used as stabilisers in PVC in December 2016. RAC adopted its opinion in December 2017 and SEAC adopted its final opinion in March 2018. ECHA sent the combined opinion and supporting documentation to the Commission during April 2018 (https://www.echa.europa.eu/web/guest/previous-consultations-on-restriction-proposals/-/substance-rev/16119/term).</p> <p>Even though the restriction may cover the use of trilead bis(carbonate)dihydroxide as stabiliser, this should have no impact on the score as the substance has not been registered for that use.</p>	<p>On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, Trilead bis(carbonate) dihydroxide gets priority for inclusion in Annex XIV among the Candidate List substances.</p> <p>Therefore, it is proposed to recommend Trilead bis(carbonate) dihydroxide for inclusion in Annex XIV.</p>
Cadmium carbonate	208-168-9	513-78-0	YES	1	0-9	0-5	<p>Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)</p>	<p>The amount of Cadmium carbonate manufactured and/or imported into the EU is according to registration data in the range of 100 -1,000 t/y.</p> <p>All registered uses may fall outside the scope of authorisation: the use as laboratory reagent (to the extent it falls under the generic exemptions for authorisation requirement for scientific research and development) and the uses in the production of frits, glass and ceramics to the extent they fulfil the intermediate use criteria. Based on the information available, ECHA is not in a position to assess whether the criteria are met for all the uses and/or for which part of the tonnage.</p> <p>It is recognized that the intermediate/non-intermediate status of these uses is a complex issue, and it is also stressed that this prioritisation exercise is not taking a formal position whether certain uses of substances are regarded as uses as intermediates in accordance with the definition in Article 3(15).</p> <p>Therefore, the volume in the scope of authorisation is estimated to be in the range of 0-1,000 t/y. Score [0-9]</p>	<p>Registered uses of cadmium carbonate in the scope of authorisation may include uses at industrial sites (formulation of mixtures, manufacture of glass, ceramics and frits) to the extent they are non-intermediate uses. [score 0-5]</p>	1-15	8	<p>Potential grouping: with some other cadmium compounds</p>	<p>Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium carbonate is postponed.</p> <p>Consequently, it is proposed NOT to recommend cadmium carbonate for inclusion in Annex XIV in this recommendation round.</p>
4-(1,1,3,3-tetramethylbutyl)phenol (4-tert-octylphenol)	205-426-2	140-66-9	YES	7	0	0	Endocrine disrupting properties (Article 57(f) - environment)	<p>The amount of 4-(1,1,3,3-tetramethylbutyl)phenol manufactured and/or imported into the EU is according to registration data > 10,000 t/y. Part of the registered tonnage is related to monomer imported as part of a polymer and is therefore not considered for priority assessment.</p> <p>The registered uses appear not to be in the scope of authorisation (uses as intermediate in manufacture of other substances, use as monomer for polymer production).</p> <p>Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.</p>	<p>There appears to be no registered uses in the scope of authorisation. Professional and consumer uses are registered, however based on information available they seem not to refer to uses of 4-(1,1,3,3-tetramethylbutyl)phenol itself.</p>	7	7	<p>Potential grouping with other 4-alkylphenols on the CL</p>	<p>Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations the recommendation of 4-(1,1,3,3-tetramethylbutyl)phenol is postponed.</p> <p>Consequently, it is proposed NOT to recommend 4-(1,1,3,3-tetramethylbutyl)phenol for inclusion in Annex XIV in this recommendation round.</p>
p-(1,1-dimethylpropyl)phenol (4-tert-pentylphenol)	201-280-9	80-46-6	YES	7	0	0	Endocrine disrupting properties (Article 57(f) - environment)	<p>The amount of p-(1,1-dimethylpropyl)phenol manufactured and/or imported into the EU is according to registration data in the range of 100 - <1,000 t/y. Part of the tonnage reported in registrations relates to the monomer imported as part of polymers and is therefore not considered for priority assessment.</p> <p>The registered uses appear not to be in the scope of authorisation (use as monomer in production of polymers (phenolic resins), use as intermediate in the production of perfumes & fragrances).</p> <p>Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.</p>	<p>There appears to be no registered uses of p-(1,1-dimethylpropyl)phenol falling in the scope of authorisation.</p>	7	7	<p>Potential grouping with other 4-alkylphenols on the CL</p>	<p>Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of p-(1,1-dimethylpropyl)phenol (4-tert-pentylphenol) is postponed.</p> <p>Consequently, it is proposed NOT to recommend p-(1,1-dimethylpropyl)phenol (4-tert-pentylphenol) for inclusion in Annex XIV in this recommendation round.</p>
4-heptylphenol, branched and linear	-	-	YES	7	0	0	Endocrine disrupting properties (Article 57(f) - environment)	<p>The total tonnage registered for 4-heptylphenol, branched and linear relates to import of monomer as part of polymers and is therefore not considered for priority assessment.</p> <p>Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.</p>	<p>There appears to be no registered uses of 4-heptylphenol, branched and linear falling in the scope of authorisation.</p>	7	7	<p>Potential grouping with other 4-alkylphenols on the CL</p>	<p>Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4-heptylphenol, branched and linear is postponed.</p> <p>Consequently, it is proposed NOT to recommend 4-heptylphenol, branched and linear for inclusion in Annex XIV in this recommendation round.</p>

Triethyl arsenate	427-700-2	15606-95-8	YES	1	0-3	0-5	Carcinogenic (Article 57a)	The amount of triethyl arsenate manufactured and/or imported into the EU according to registration data (notifications under NONS) is <10t/y but these data are from 1998. In a background document developed in 2009 in the context of the first recommendation (and available on ECHA's website), the tonnage imported (no manufacture) is given as < 0.1 t/y. Based on available information on use, part of its volume may be used as intermediate, but whether this is the case and the corresponding volume is unknown. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 0 - <10t/y.	According to available information, triethyl arsenate is used at industrial sites in specialised doping applications in semi-conductors. Based on available information it is not possible to conclude whether this is a use as an intermediate. [score 0-5]	1-9	5		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of triethyl arsenate is postponed. Consequently, it is proposed <u>NOT</u> to recommend triethyl arsenate for inclusion in Annex XIV in this recommendation round.
Cadmium chloride	233-296-7	10108-64-2	YES	1	0-3	0-5	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	According to registration information, cadmium chloride is no longer manufactured and/or imported into the EU. However, the registration status of the substance is still active, and uses in the scope of authorisation are still registered. Therefore, some uses of the substance may remain in the EU. In conclusion, the volume in the scope of authorisation is estimated to be in the range of 0 - <10 t/y.	Uses of the substance at industrial sites in the scope of authorisation (in the formulation of mixtures and use in the production of PV-modules) are still registered. [score 0 - 5]	1-9	5	Potential grouping: with some other cadmium compounds	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium chloride is postponed. Consequently, it is proposed <u>NOT</u> to recommend cadmium chloride for inclusion in Annex XIV in this recommendation round.
Lead oxide sulfate	234-853-7	12036-76-9	YES	1	0-3	0-5	Toxic for reproduction (Article 57 c)	Lead oxide sulfate is according to registration data no longer manufactured and/or imported into the EU. Furthermore, industry has communicated to ECHA that the substance is practically in the phase-out. However, the registration status of the substance is still active, and uses in the scope of authorisation are still registered. Therefore, some use of the substance may remain in the EU. In conclusion, the volume in the scope of authorisation is estimated to be in the range of 0 - <10 t/y.	Industry has informed ECHA that the substance is practically in the phase-out. However, uses of the substance at industrial sites in the scope of authorisation (in the production of coatings and inks and application of coatings and inks for mirror backing) are still registered. [score 0- 5] Furthermore, according to registration data the substance is used in articles (mirror coatings). However, it appears that the release of the substance from these articles might be negligible.	1-9	5	Grouping with other lead substances that can be used as stabilisers in PVC. <u>Other further consideration:</u> ECHA at the request of the Commission submitted a restriction dossier on lead compounds used as stabilisers in PVC in December 2016. RAC adopted its opinion in December 2017 and SEAC adopted its final opinion in March 2018. ECHA sent the combined opinion and supporting documentation to the Commission during April 2018 (https://www.echa.europa.eu/web/guest/previous-consultations-on-restriction-proposals/-/substance-rev/16119/term). Even though the restriction may cover the use of lead oxide sulfate as stabiliser, this should have no impact on the score as the substance has not been registered for that use.	On the basis of Art. 58(3) prioritisation criteria further strengthened by grouping considerations, Lead oxide sulfate gets priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to recommend Lead oxide sulfate for inclusion in Annex XIV.
Cadmium nitrate	233-710-6	10022-68-1, 10325-94-7	YES	1	0	0	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium nitrate manufactured and/or imported into the EU is according to registration data in the range of 1 to 100 t/y. The registered uses appear not to be in the scope of authorisation (use as intermediate). Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of cadmium nitrate falling in the scope of authorisation. [score 0]	1	1	Potential grouping: with some other cadmium compounds	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium nitrate is postponed. Consequently, it is proposed <u>NOT</u> to recommend cadmium nitrate for inclusion in Annex XIV in this recommendation round.
Silicic acid, lead salt	234-363-3	11120-22-2	YES	1	0	0	Toxic for reproduction (Article 57 c)	There are currently no active registrations for silicic acid, lead salt under Regulation (EC) No 1907/2006 (REACH).	There are currently no active registrations for silicic acid, lead salt under Regulation (EC) No 1907/2006 (REACH). [score 0]	1	1	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of silicic acid, lead salt is postponed. Consequently, it is proposed <u>NOT</u> to recommend silicic acid, lead salt for inclusion in Annex XIV in this recommendation round.
N-methylacetamide	201-182-6	79-16-3	YES	1	0	0	Toxic for reproduction (Article 57 c)	The full amount of N-methylacetamide manufactured and/or imported into the EU according to registration data seems to be used as intermediate and therefore outside the scope of authorisation. Therefore, in conclusion, it is estimated that no volume is in the scope of authorisation.	There appears to be no registered uses of N-methylacetamide falling in the scope of authorisation. [score 0]	1	1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of N-methylacetamide is postponed. Consequently, it is proposed <u>NOT</u> to recommend N-methylacetamide for inclusion in Annex XIV in this recommendation round.
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	YES	1	0	0	Toxic for reproduction (Article 57 c)	There are currently no active registrations for 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine, under Regulation (EC) No 1907/2006 (REACH).	There are currently no active registrations for 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine, under Regulation (EC) No 1907/2006 (REACH). [score 0]	1	1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine is postponed. Consequently, it is proposed <u>NOT</u> to recommend 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine for inclusion in Annex XIV in this recommendation round.

1,2,3-Trichloropropane	202-486-1	96-18-4	YES	1	0	0	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	The amount of 1,2,3-trichloropropane manufactured and/or imported into the EU is according to registration data above 1,000 t/y. The registered uses appear not to be in the scope of authorisation (uses as intermediate in manufacture of other substances, use as monomer for polymer production). Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of 1,2,3-trichloropropane falling in the scope of authorisation. [score 0]	1	1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 1,2,3-trichloropropane is postponed. Consequently, it is proposed <u>NOT</u> to recommend 1,2,3-trichloropropane for inclusion in Annex XIV in this recommendation round.
Acrylamide	201-173-7	79-06-1	YES	1	0	0	Carcinogenic and mutagenic (Articles 57 a and 57 b)	The amount of acrylamide manufactured and/or imported into the EU is according to registration data above 10,000 t/y. Part of the registered tonnage is related to monomer imported as part of polymers and is therefore not considered for priority assessment. The registered uses appear not to be in the scope of authorisation (uses as intermediate, use as monomer for polymerisation process at industrial sites, to the extent it falls under the generic exemptions from authorisation requirement uses as laboratory reagent, and professional use as monomer in polymerisation process for grouting application). Due to the existing restriction under Annex XVII, this last use should be limited to use in concentration below 0.1%, which is exempted from authorisation requirement. Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of acrylamide falling in the scope of authorisation. [score 0]	1	1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of acrylamide is postponed. Consequently, it is proposed <u>NOT</u> to recommend acrylamide for inclusion in Annex XIV in this recommendation round.
o-Toluidine	202-429-0	95-53-4	YES	1	0	0	Carcinogenic (Article 57a)	The amount of o-toluidine manufactured and/or imported into the EU is according to registration data above 10,000 t/y. All uses appear not to be in the scope of authorisation (uses as intermediate and use as laboratory reagent in scientific research and development). Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of o-toluidine falling in the scope of authorisation [score 0].	1	1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of o-toluidine is postponed. Consequently, it is proposed <u>NOT</u> to recommend o-toluidine for inclusion in Annex XIV in this recommendation round.
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	YES	15	0	0	PBT (Article 57 d); vPvB (Article 57 e)	The amount of decaBDE imported into the EU is according to current registration data in the range of 1,000-10,000 t/y. After the restriction comes into force (see "Further considerations" column), there is no volume in the scope of authorisation.	After the restriction comes into force (see "Further considerations" column), there are no uses in the scope of authorisation.	-	-	Other regulatory processes: <u>Restriction</u> In February 2017 the REACH restriction of decaBDE was published in the OJ banning the manufacture, use and placing on the market as a substance, as a constituent of substances or in mixtures $\geq 0.1\%$, and of articles containing DecaBDE $\geq 0.1\%$. Some time limited exemptions were granted for production of aircrafts and certain vehicles as well as production of certain spare parts. The provisions will come into force in March 2019. <u>Stockholm Convention</u> Decabromodiphenyl ether (commercial mixture, c-DecaBDE) was listed as POP in the Stockholm Convention by amendment of Annex A (elimination) with specific exemptions in 2017.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of decaBDE is postponed. Consequently, it is proposed <u>NOT</u> to recommend decaBDE for inclusion in Annex XIV in this recommendation round.
Nitrobenzene	202-716-0	98-95-3	INT	1	-	-	Toxic for reproduction (Article 57 c)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of nitrobenzene is postponed. Consequently, it is proposed <u>NOT</u> to recommend nitrobenzene for inclusion in Annex XIV in this recommendation round.
α,α -Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	229-851-8	6786-83-0	NO	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of α,α -Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] is postponed. Consequently, it is proposed <u>NOT</u> to recommend α,α-Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] for inclusion in Annex XIV in this recommendation round.
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	573-58-0	NO	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of C.I. Direct Red 28 is postponed. Consequently, it is proposed <u>NOT</u> to recommend C.I. Direct Red 28 for inclusion in Annex XIV in this recommendation round.

Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	217-710-3	1937-37-7	NO	1	-	-	Carcinogenic (Article 57a)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of C.I. Direct Black 38 is postponed. Consequently, it is proposed <u>NOT</u> to recommend C.I. Direct Black 38 for inclusion in Annex XIV in this recommendation round.
1,2-Diethoxyethane	211-076-1	629-14-1	NO	1	-	-	Toxic for reproduction (Article 57 c)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 1,2-diethoxyethane is postponed. Consequently, it is proposed <u>NOT</u> to recommend 1,2-diethoxyethane for inclusion in Annex XIV in this recommendation round.
2-Ethoxyethyl acetate	203-839-2	111-15-9	NO	1	-	-	Toxic for reproduction (article 57c)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 2-ethoxyethyl acetate is postponed. Consequently, it is proposed <u>NOT</u> to recommend 2-ethoxyethyl acetate for inclusion in Annex XIV in this recommendation round.
2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	INT	1	-	-	Carcinogenic (article 57 a)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 2-Methoxyaniline; o-Anisidine is postponed. Consequently, it is proposed <u>NOT</u> to recommend 2-Methoxyaniline; o-Anisidine for inclusion in Annex XIV in this recommendation round.
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	NO	1	-	-	Carcinogenic (Article 57a)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 4,4'-bis(dimethylamino)benzophenone (Michler's ketone) is postponed. Consequently, it is proposed <u>NOT</u> to recommend 4,4'-bis(dimethylamino)benzophenone (Michler's ketone) for inclusion in Annex XIV in this recommendation round.
4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	INT	1	-	-	Carcinogenic (Article 57a)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 4,4'-methylenedi-o-toluidine is postponed. Consequently, it is proposed <u>NOT</u> to recommend 4,4'-methylenedi-o-toluidine for inclusion in Annex XIV in this recommendation round.
4-Aminoazobenzene	200-453-6	60-09-3	INT	1	-	-	Carcinogenic (Article 57a)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 4-Aminoazobenzene is postponed. Consequently, it is proposed <u>NOT</u> to recommend 4-Aminoazobenzene for inclusion in Annex XIV in this recommendation round.
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7	INT	1	-	-	Carcinogenic (Article 57a)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 4-methyl-m-phenylenediamine (toluene-2,4-diamine) is postponed. Consequently, it is proposed <u>NOT</u> to recommend 4-methyl-m-phenylenediamine (toluene-2,4-diamine) for inclusion in Annex XIV in this recommendation round.
6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	INT	1	-	-	Carcinogenic (Article 57a)			-	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 6-methoxy-m-toluidine (p-cresidine) is postponed. Consequently, it is proposed <u>NOT</u> to recommend 6-methoxy-m-toluidine (p-cresidine) for inclusion in Annex XIV in this recommendation round.

Anthracene	204-371-1	120-12-7	INT	13	-	-	PBT (article 57d)			-	-	Potential grouping: there is uncertainty as to whether and to which extent it could substitute further coal-stream-substances included in the 6th A.XIV recommendation	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Anthracene is postponed. Consequently, it is proposed <u>NOT</u> to recommend Anthracene for inclusion in Annex XIV in this recommendation round.
Anthracene oil, anthracene paste	292-603-2	90640-81-6	INT	15	-	-	Carcinogenic ¹ , mutagenic ¹ , PBT and vPvB (Articles 57a, 57b, 57d and 57e)			-	-	¹ The classification is conditional on the presence of benzo[a]pyrene (EC 200-028-5) and/or benzene (EC 200-753-7) above defined concentration limits. Potential grouping: there is uncertainty as to whether and to which extent it could substitute further coal-stream-substances included in the 6th A.XIV recommendation	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of anthracene oil, anthracene paste is postponed. Consequently, it is proposed <u>NOT</u> to recommend anthracene oil, anthracene paste for inclusion in Annex XIV in this recommendation round.
Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	NO	15	-	-	Carcinogenic ¹ , mutagenic ¹ , PBT and vPvB (Articles 57a, 57b, 57d and 57e)			-	-	¹ The classification is conditional on the presence of benzo[a]pyrene (EC 200-028-5) and/or benzene (EC 200-753-7) above defined concentration limits. Potential grouping: there is uncertainty as to whether and to which extent it could substitute further coal-stream-substances included in the 6th A.XIV recommendation	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of anthracene oil, anthracene paste, anthracene fraction is postponed. Consequently, it is proposed <u>NOT</u> to recommend anthracene oil, anthracene paste, anthracene fraction for inclusion in Annex XIV in this recommendation round.
Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4	INT	15	-	-	Carcinogenic ¹ , mutagenic ¹ , PBT and vPvB (Articles 57a, 57b, 57d and 57e)			-	-	¹ The classification is conditional on the presence of benzo[a]pyrene (EC 200-028-5) and/or benzene (EC 200-753-7) above defined concentration limits. Potential grouping: there is uncertainty as to whether and to which extent it could substitute further coal-stream-substances included in the 6th A.XIV recommendation	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of anthracene oil, anthracene paste, distn. lights is postponed. Consequently, it is proposed <u>NOT</u> to recommend anthracene oil, anthracene paste, distn. lights for inclusion in Annex XIV in this recommendation round.
Anthracene oil, anthracene-low	292-604-8	90640-82-7	INT	15	-	-	Carcinogenic ¹ , mutagenic ¹ , PBT and vPvB (Articles 57a, 57b, 57d and 57e)			-	-	¹ The classification is conditional on the presence of benzo[a]pyrene (EC 200-028-5) and/or benzene (EC 200-753-7) above defined concentration limits. Potential grouping: there is uncertainty as to whether and to which extent it could substitute further coal-stream-substances included in the 6th A.XIV recommendation	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of anthracene oil, anthracene-low is postponed. Consequently, it is proposed <u>NOT</u> to recommend anthracene oil, anthracene-low for inclusion in Annex XIV in this recommendation round.
Benz[a]anthracene	200-280-6	56-55-3, 1718-53-2	NO	15	-	-	Carcinogenic (Article 57a); PBT (Article 57d); vPvB (Article 57e)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Benz[a]anthracene is postponed. Consequently, it is proposed <u>NOT</u> to recommend Benz[a]anthracene for inclusion in Annex XIV in this recommendation round.
Benzo[def]chrysene (Benzo[a]pyrene)	200-028-5	50-32-8	NO	15	-	-	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); PBT (Article 57d); vPvB (Article 57e)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Benzo[def]chrysene (Benzo[a]pyrene) is postponed. Consequently, it is proposed <u>NOT</u> to recommend Benzo[def]chrysene (Benzo[a]pyrene) for inclusion in Annex XIV in this recommendation round.
Biphenyl-4-ylamine	202-177-1	92-67-1	NO	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of biphenyl-4-ylamine is postponed. Consequently, it is proposed <u>NOT</u> to recommend biphenyl-4-ylamine for inclusion in Annex XIV in this recommendation round.

Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9	INT	13	-	-	PBT (article 57d)			-	-	Potential grouping with other tin-containing Candidate List substances (DBTC, DOTE, reaction mass of DOTE and MOTE)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of bis(tributyltin)oxide (TBTO) is postponed. Consequently, it is proposed NOT to recommend bis(tributyltin)oxide (TBTO) for inclusion in Annex XIV in this recommendation round.
Cadmium sulphate	233-331-6	10124-36-4, 31119-53-6	INT	1	-	-	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)			-	-	Potential grouping: with some other cadmium compounds	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of Cadmium sulphate is postponed. Consequently, it is proposed NOT to recommend Cadmium sulphate for inclusion in Annex XIV in this recommendation round.
Cadmium fluoride	232-222-0	7790-79-6	NO	1	-	-	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)			-	-	Potential grouping: with some other cadmium compounds	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of Cadmium fluoride is postponed. Consequently, it is proposed NOT to recommend Cadmium fluoride for inclusion in Annex XIV in this recommendation round.
Calcium arsenate	231-904-5	7778-44-1	NO	1	-	-	Carcinogenic (article 57 a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of calcium arsenate is postponed. Consequently, it is proposed NOT to recommend calcium arsenate for inclusion in Annex XIV in this recommendation round.
Chrysene	205-923-4	218-01-9, 1719-03-5	NO	15	-	-	Carcinogenic (Article 57a); PBT (Article 57d); vPvB (Article 57e)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Chrysene is postponed. Consequently, it is proposed NOT to recommend Chrysene for inclusion in Annex XIV in this recommendation round.
Diethyl sulphate	200-589-6	64-67-5	INT	1	-	-	Carcinogenic (Article 57a); Mutagenic (Article 57b)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of diethyl sulphate is postponed. Consequently, it is proposed NOT to recommend diethyl sulphate for inclusion in Annex XIV in this recommendation round.
Dimethyl sulphate	201-058-1	77-78-1	INT	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of dimethyl sulphate is postponed. Consequently, it is proposed NOT to recommend dimethyl sulphate for inclusion in Annex XIV in this recommendation round.
Furan	203-727-3	110-00-9	INT	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of furan is postponed. Consequently, it is proposed NOT to recommend furan for inclusion in Annex XIV in this recommendation round.

Lead dipicrate	229-335-2	6477-64-1	NO	1	-	-	Toxic for reproduction (Article 57 c)			-	-	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of lead dipicrate is postponed. Consequently, it is proposed NOT to recommend lead dipicrate for inclusion in Annex XIV in this recommendation round.
Lead hydrogen arsenate	232-064-2	7784-40-9	NO	1	-	-	Carcinogenic and toxic for reproduction (Articles 57 a and 57 c)			-	-	Potential grouping: with some other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of lead hydrogen arsenate is postponed. Consequently, it is proposed NOT to recommend lead hydrogen arsenate for inclusion in Annex XIV in this recommendation round.
Methoxyacetic acid	210-894-6	625-45-6	INT	1	-	-	Toxic for reproduction (Article 57 c)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of methoxyacetic acid is postponed. Consequently, it is proposed NOT to recommend methoxyacetic acid for inclusion in Annex XIV in this recommendation round.
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	NO	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base) is postponed. Consequently, it is proposed NOT to recommend N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base) for inclusion in Annex XIV in this recommendation round.
o-aminoazotoluene	202-591-2	97-56-3	NO	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of o-aminoazotoluene is postponed. Consequently, it is proposed NOT to recommend o-aminoazotoluene for inclusion in Annex XIV in this recommendation round.
Perfluorohexane-1-sulphonic acid and its salts (PFHxS) (C6-PFSA)	-	-	NO	13	-	-	vPvB (Article 57 e)			-	-	There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Perfluorohexane-1-sulphonic acid and its salts (PFHxS) (C6-PFSA) is postponed. Consequently, it is proposed NOT to recommend Perfluorohexane-1-sulphonic acid and its salts (PFHxS) (C6-PFSA) for inclusion in Annex XIV in this recommendation round.
Ammonium pentadecafluorooctanoate (APFO) (C8-PFCA)	223-320-4	3825-26-1	NO	15	-	-	Toxic for reproduction (Article 57 c); PBT (Article 57 d)			-	-	There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together. <u>Restriction</u> DE & NO submitted a restriction proposal for manufacture, use and placing on the market of PFOA, its salts (including APFO) and its precursors (PFOA related substances) as substances on their own, constituents, in mixtures and in articles (October 2014). RAC and SEAC finalised their opinions in 2015. The restriction was added as entry 68 of Annex XVII of REACH in 2017. https://echa.europa.eu/previous-consultations-on-restriction-proposals/-/substance-rev/1908/term <u>Stockholm Convention</u> It has been recommended to list pentadecafluorooctanoic acid (PFOA), its salts and PFOA-related compounds in Annex A (elimination) or B (restriction) to the Convention with specific exemptions.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of ammonium pentadecafluorooctanoate (APFO) is postponed. Consequently, it is proposed NOT to recommend ammonium pentadecafluorooctanoate (APFO) for inclusion in Annex XIV in this recommendation round.

Pentadecafluorooctanoic acid (PFOA) (C8-PFCA)	206-397-9	335-67-1	NO	15	-	-	Toxic for reproduction (Article 57 c); PBT (Article 57 d)			-	-	There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together. <u>Restriction</u> DE & NO submitted a restriction proposal for manufacture, use and placing on the market of PFOA, its salts (including APFO) and its precursors (PFOA related substances) as substances on their own, constituents, in mixtures and in articles (October 2014). RAC and SEAC finalised their opinions in 2015. The restriction was added as entry 68 of Annex XVII of REACH in 2017. https://echa.europa.eu/previous-consultations-on-restriction-proposals/-/substance-rev/1908/term <u>Stockholm Convention</u> It has been recommended to list pentadecafluorooctanoic acid (PFOA), its salts and PFOA-related compounds in Annex A (elimination) or B (restriction) to the Convention with specific exemptions.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of pentadecafluorooctanoic acid (PFOA) is postponed. Consequently, it is proposed <u>NOT</u> to recommend pentadecafluorooctanoic acid (PFOA) for inclusion in Annex XIV in this recommendation round.
Perfluorononan-1-oic acid and its sodium and ammonium salts (PFNA) (C9-PFCA)	206-801-3	375-95-1; 21049-39-8; 4149-60-4	NO	15	-	-	Toxic for reproduction (Article 57 c); PBT (Article 57 d)			-	-	There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together. In addition, DE & SE have submitted in October 2017 a restriction proposal covering the manufacture, use and placing on the market as substances, constituents of other substances and mixtures of a number of long chain PFCAs (C9-C14 PFCAs) including their salts and precursors. The placing on the market of articles or any parts thereof containing one of the substances is also intended to be restricted. The proposal is currently being discussed in RAC and SEAC. https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/18115/term	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of Perfluorononan-1-oic acid and its sodium and ammonium salts (PFNA) (C9-PFCA) is postponed. Consequently, it is proposed <u>NOT</u> to recommend Perfluorononan-1-oic acid and its sodium and ammonium salts (PFNA) (C9-PFCA) for inclusion in Annex XIV in this recommendation round.
Nonadecafluorodecanoic acid (PFDA) [1] and its sodium [2] and ammonium [3] salts (C10-PFCA)	206-400-3 [1], Not applicable [2], 221-470-5 [3]	335-76-2 [1], 3830-45-3 [2], 3108-42-7 [3]	NO	15	-	-	Toxic for reproduction (Article 57 c); PBT (Article 57 d)			-	-	There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together. In addition, DE & SE have submitted in October 2017 a restriction proposal covering the manufacture, use and placing on the market as substances, constituents of other substances and mixtures of a number of long chain PFCAs (C9-C14 PFCAs) including their salts and precursors. The placing on the market of articles or any parts thereof containing one of the substances is also intended to be restricted. The proposal is currently being discussed in RAC and SEAC. https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/18115/term	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Nonadecafluorodecanoic acid (PFDA) [1] and its sodium [2] and ammonium [3] salts (C10-PFCA) is postponed. Consequently, it is proposed <u>NOT</u> to recommend Nonadecafluorodecanoic acid (PFDA) [1] and its sodium [2] and ammonium [3] salts (C10-PFCA) for inclusion in Annex XIV in this recommendation round.
Henicosafuoroundecanoic acid (C11-PFCA)	218-165-4	2058-94-8	NO	13	-	-	vPvB (Article 57 e)			-	-	There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together. In addition, DE & SE have submitted in October 2017 a restriction proposal covering the manufacture, use and placing on the market as substances, constituents of other substances and mixtures of a number of long chain PFCAs (C9-C14 PFCAs) including their salts and precursors. The placing on the market of articles or any parts thereof containing one of the substances is also intended to be restricted. The proposal is currently being discussed in RAC and SEAC. https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/18115/term	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of henicosafuoroundecanoic acid is postponed. Consequently, it is proposed <u>NOT</u> to recommend henicosafuoroundecanoic acid for inclusion in Annex XIV in this recommendation round.
Tricosafuorododecanoic acid (C12-PFCA)	206-203-2	307-55-1	NO	13	-	-	vPvB (Article 57 e)			-	-	There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together. In addition, DE & SE have submitted in October 2017 a restriction proposal covering the manufacture, use and placing on the market as substances, constituents of other substances and mixtures of a number of long chain PFCAs (C9-C14 PFCAs) including their salts and precursors. The placing on the market of articles or any parts thereof containing one of the substances is also intended to be restricted. The proposal is currently being discussed in RAC and SEAC. https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/18115/term	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of tricosafuorododecanoic acid is postponed. Consequently, it is proposed <u>NOT</u> to recommend tricosafuorododecanoic acid for inclusion in Annex XIV in this recommendation round.
Pentacosafuorotridecanoic acid (C13-PFCA)	276-745-2	72629-94-8	NO	13	-	-	vPvB (Article 57 e)			-	-	There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together. In addition, DE & SE have submitted in October 2017 a restriction proposal covering the manufacture, use and placing on the market as substances, constituents of other substances and mixtures of a number of long chain PFCAs (C9-C14 PFCAs) including their salts and precursors. The placing on the market of articles or any parts thereof containing one of the substances is also intended to be restricted. The proposal is currently being discussed in RAC and SEAC. https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/18115/term	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of pentacosafuorotridecanoic acid is postponed. Consequently, it is proposed <u>NOT</u> to recommend pentacosafuorotridecanoic acid for inclusion in Annex XIV in this recommendation round.

Heptacosafuorotetradecanoic acid (C14-PFCA)	206-803-4	376-06-7	NO	13	-	-	vPvB (Article 57 e)			-	-	<p>There are further perfluorinated carboxylic acids (PFCAs) on the Candidate List (none of which currently registered) which could potentially be grouped together.</p> <p>In addition, DE & SE have submitted in October 2017 a restriction proposal covering the manufacture, use and placing on the market as substances, constituents of other substances and mixtures of a number of long chain PFCAs (C9-C14 PFCAs) including their salts and precursors. The placing on the market of articles or any parts thereof containing one of the substances is also intended to be restricted. The proposal is currently being discussed in RAC and SEAC. https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/18115/term</p>	<p>Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of heptacosafuorotetradecanoic acid is postponed. Consequently, it is proposed <u>NOT</u> to recommend heptacosafuorotetradecanoic acid for inclusion in Annex XIV in this recommendation round.</p>
Trilead diarsenate	222-979-5	3687-31-8	NO	1	-	-	Carcinogenic and toxic for reproduction (Articles 57 a and 57 c)			-	-	<p>Potential grouping: with some other lead substances (CL)</p>	<p>Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of trilead diarsenate is postponed. Consequently, it is proposed <u>NOT</u> to recommend trilead diarsenate for inclusion in Annex XIV in this recommendation round.</p>