Rolling List of (groups of) substances for restriction updating Annex I to the Restrictions Roadmap under the Chemicals Strategy for Sustainability SWD(2022) 128 final

Revised version 1 July 2024

Pool 0: Intention to prepare restriction dossier already on the Registry of Intention (RoI) or mandate to prepare a restriction dossier provided to ECHA

Pool definition: Pool 0 contains substances that are already included in the Registry of Intention (RoI) for restrictions¹ or where the Commission has requested ECHA to prepare a restriction dossier. Restriction dossiers that have already been submitted are not included in pool 0 but are listed in Appendix 1.

	Subject of restriction proposal	Group restriction or number of substances to be restricted	Hazards in scope Confirmed or [suspected hazards]	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information	State of play
1.1	CMRs in childcare articles	Group	CMR	A	Restriction proposal by Commission based on Article 68(2). Commission request to ECHA to support	ECHA investigation report

1. Pool 0 - Commission mandates to ECHA

¹ <u>https://echa.europa.eu/registry-of-restriction-intentions</u>

					 (investigation report). Annex XV is not applicable (Article 68(2) process). The scope covers substances which are classified as carcinogen, germ cell mutagen or reproductive toxicant category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008. 	submitted to the Commission ² . Planned first discussion in REACH committee in October 2024
1.2	Chromium VI compounds (e.g. Chromium trioxide, acids generated from chromium trioxide and their oligomers)	Group	CMR	I, P	Mandate to ECHA ³ requesting the development of an Annex XV dossier with a view to restrict at least certain Cr (VI) substances under REACH.	RoI entry ⁴ added on 13 October 2023 Submission of Annex XV dossier planned for 4 April 2024

2. Pool 0 - ECHA Article 69.2

None

3. Pool 0 - Member States

Subject of restriction proposal	restriction scor or number of Con substances [sus	zards in Uses in scope Industrial (I) nfirmed or uspected zards] Consumer (C) Articles (A)	Additional information	State of play
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² <u>https://echa.europa.eu/-/echa-s-investigation-finds-toxic-chemicals-present-in-childcare-products</u>

³ https://echa.europa.eu/documents/10162/17233/restdp_chromium_vi_mandate_redacted.pdf/3f84e822-1ed3-1cf0-899c-3b04083b8fe5?t=1697006878977

⁴ https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18971243a

3.1	1,4-dioxane DE	1	C, Equivalent level of concern having probable serious effects to human health and environment ('PMT-like')	I, P, C	Restriction of the manufacture, placing on the market and use of 1,4-dioxane in surfactants	RoI entry ⁵ updated in October 2023 Submission of Annex XV planned for October 2025
3.2	Octocrilene FR	1	Aquatic toxicity	Risks are mainly observed for the specific use of octocrylene in plastisol, and as UV filter in cosmetic ingredients.	Restricting the placing on the market of mixtures containing octocrilene.	RoI entry ⁶ added October 2023 Submission of Annex XV dossier planned for 10 January 2025

Pool 1: Planned restrictions not yet on the RoI for restriction

Pool definition: Pool 1 contains substances for which work is already very advanced and that are under consideration by ECHA, Member States or the Commission for restriction. For some of these substances, preparatory work towards a planned restriction dossier has already started. Furthermore, for some (groups of) substances classification under the CLP Regulation or SVHC-identification under REACH is discussed as the next regulatory action.

⁵ <u>https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18609e1d9</u>

⁶ https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e1897532f5

	Subject of planned restriction proposal	Group restriction or number of substances to be restricted	Known or potential hazards	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information	Anticipated year of inclusion in the RoI for restriction
4.1	PVC and its additives	Group	Multiple hazard properties	A	Possible mandate to ECHA for a restriction dossier preparation as follow- up from the published investigation report on PVC and PVC additives ⁷ .	Q3 2024
4.2	Flame retardants (investigation report and potential restriction)	Group	TBD	I, P, C, A	Mandate to ECHA for an investigation report on flame retardants with a particular focus on aromatic brominated flame retardants to gather further information that can support the strategy on flame retardants. The investigation report should be delivered by December 2024. ⁸ The Commission will consider in Q4 2024/Q1 2025 mandating ECHA to prepare a restriction dossier (scope to be decided) taking into account the investigation report and the ECHA's Regulatory strategy for flame retardants ⁹ .	Q4 2024/Q1 2025 (decision on mandate for restriction dossier)

4. Pool 1 -Anticipated Commission request to ECHA

⁷ <u>https://echa.europa.eu/completed-activities-on-restriction</u>

⁸ https://echa.europa.eu/documents/10162/17233/rest_flame_retardants_com_mandate_en.pdf/3e50850a-610d-385b-b5ed-b7dedb35cb46?t=1705476115426

⁹ https://echa.europa.eu/documents/10162/2082415/flame_retardants_strategy_en.pdf/9dd56b7e-4b62-e31b-712f-16cc51d0e724?t=1679045593845

	Subject of planned restriction proposal	Group restriction or number of substances to be restricted	Known or potential hazards	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information	Anticipated year of inclusion in the RoI for restriction
4.3	Organophosphate flame retardants (OPFRs) (tris(2- chloroethyl) phosphate (TCEP), tris(2-chloro-1- methylethyl) phosphate (TCPP), tris[2-chloro-1- (chloromethyl)ethyl] phosphate (TDCP))	3	CR	A	Withdrawn from RoI until clarity on hazard (US NTP study with TCPP was ongoing). The Commission will consider mandating a restriction dossier to ECHA after hazard clarification and taking into account the ECHA strategy on flame retardants and the ECHA investigation report on flame retardants. See also entry 4.2 on 'flame retardants' and entry 1.1 on 'CMRs in childcare articles' ¹⁰ . DK indicated interest in collaboration in case of a mandate for a restriction.	To be defined
4.4	Ortho-phthalates (C4-C6)	Group	R, ED	P, C, A	From ECHA's assessment of regulatory needs on phthalates. Possible restriction via Article 69(1) extending the existing restriction on 4 phthalates in articles. Restriction may cover in addition to phthalates on Annex XIV some other ortho-phthalates currently under the group work in ECHA. Ongoing study for developing the dossier for CLH and/or SVHC identification for around 40 C4-C6 ortho-phthalates could	Not before Q4 2025

¹⁰ <u>https://echa.europa.eu/-/echa-s-investigation-finds-toxic-chemicals-present-in-childcare-products</u>

	Subject of planned restriction proposal	Group restriction or number of substances to be restricted	Known or potential hazards	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information	Anticipated year of inclusion in the RoI for restriction
				be used to complement the restriction. France is preparing a group entry for C4- C6 phthalates and plans to submit the CLH report in 2024, RAC opinion earliest September 2025.		
4.5	Hydrocarbyl siloxanes	Group	PBT/vPvB	(I), P, C, A	ECHA, Member States and COM are currently assessing the need for further regulatory management measures for a group of hydrocarbyl siloxanes (linear and branched aliphatic and aromatic siloxanes, as well as cyclic siloxanes and polymeric siloxanes notified under previous legislation (NONS). ECHA's Assessment of Regulatory Needs ¹¹ for hydrocarbyl siloxanes suggests restricting industrial, professional and consumer uses and articles based on PBT/vPvB properties.	Not before 2025
4.6	Bisphenols (4,4'-isopropylidenediphenol (bisphenol A) and structurally related bisphenols (including	Group	R, ED HH	I, P, C, A	COM and ECHA are currently assessing the need for further regulatory action, including restrictions, SVHC-identification or CLH for bisphenols and taking into account the work on the restriction dossier of bisphenol A and structurally	Timing not decided

¹¹ <u>https://echa.europa.eu/documents/10162/fc18654c-1901-c7bc-f917-990aad1432b0</u>

	Subject of planned restriction proposal	Group restriction or number of substances to be restricted	Known or potential hazards	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information	Anticipated year of inclusion in the RoI for restriction
	derivatives)				related bisphenols (including derivatives) of similar concern for the environment (pool 1, entry 6.1).Depending on the outcome of these discussions, COM could request ECHA to prepare a restriction dossier that may complement the restriction of some bisphenols for environmental risks (pool 1, entry 6.1) due to concerns for human health as well as to cover additional bisphenols.	
4.7	Substances in thermal paper	Group	R, ED (maybe others)	Р, С, А	Follow-up to restriction of bisphenol A in thermal paper, which asked to monitor the use of bisphenol S as a potential substitute in thermal paper. The possible restriction might target bisphenols but also other substances. Hence, the scope of substances might partly overlap with those in pool 1, entry 4.6.	Timing not yet decided

5. Pool 1 -ECHA Article 69.2

Subject of planned restriction proposal	GroupHazards inrestrictionscopeor numberofofConfirmed orsubstances[suspected]	Uses in scope Industrial (I) Professional (P)	Additional information	Anticipated year of inclusion in the RoI for restriction
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		to be restricted	hazards]	Consumer (C) Articles (A)		
5.1	Lead chromate; Lead sulfochromate yellow (C.I. Pigment Yellow 34); Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	3	CR	A	Art 69(2) proposal to target other materials than PVC (risks from these substances in PVC articles are covered by the existing restriction of lead in PVC)	Timing not yet decided

6. Pool 1 -Member States

	Subject of planned restriction proposal	Group restriction or number of substances to be restricted	Hazards in scope Confirmed or [suspected hazards]	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information	Anticipated year of inclusion in the RoI for restriction
6.1	4,4'-isopropylidenediphenol (bisphenol A) and structurally related bisphenols (including derivatives) of similar concern for the environment DE	Group	ED for ENV	I, P, C, A	The German authorities have withdrawn their proposal ¹² to restrict bisphenols that have endocrine disrupting properties to the environment from the opinion-making process . They intend to re-submit an updated proposal to ECHA once they have considered the information submitted by stakeholders during the six-month consultation and reworked the scope of the restriction. See also entry 4.6 in pool 1 regarding bisphenols and human health.	To be announced

¹² https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e1853413ea

Appendix 1 Restriction cases under opinion making, decision making or recently decided

Restriction cases in opinion making

Submitted restriction dossiers that are subject to opinion-making procedure in the ECHA Risk Assessment and Socio-Economic Assessment Committees are listed here.

Restriction case	Link to the RoI
Per- and polyfluoroalkyl substances (PFAS) ('Universal PFAS restriction')	https://echa.europa.eu/registry-of-restriction-intentions/-//dislist/details/0b0236e18663449b

Restriction cases under decision making

Restriction cases under decision making by the Commission are listed here: i.e. cases where ECHA's committees have adopted their opinions and the Commission will provide, or has provided, a draft amendment to the list of restrictions in Annex XVII to REACH, but the final decision is yet to be taken in a comitology procedure with scrutiny involving the Member States and the European Parliament Alternatively, in case no restriction is proposed by the Commission, a Commission Decision on the termination of the restriction is yet to be adopted.

Restriction case	Link to the RoI
Calcium cyanamide	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e1824484f8
Skin sensitising, irritative and/or corrosive substances in textile, leather, hide and fur articles	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e182446136
Medium-chain chlorinated paraffins (MCCP) and other substances that contain chloroalkanes with carbon chain lengths within the range from C14 to C17	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e18682f8e1
Substances containing polycyclic aromatic hydrocarbons (PAHs) in clay targets for shooting	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e186716202

Lead in outdoor shooting and fishing	https://echa.europa.eu/registry-of-restriction-intentions/-//dislist/details/0b0236e1840159e6
N,N-dimethylacetamide (DMAC); 1-ethylpyrrolidin-2-one (NEP)	https://echa.europa.eu/registry-of-restriction-intentions/-//dislist/details/0b0236e1844d552a
Terphenyl, hydrogenated	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e1862d9f6a
Dechlorane Plus ^{TM 13} , ¹⁴	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e184a168c4
Per- and polyfluoroalkyl substances (PFASs) in firefighting foams	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e1856e8ce6
2,4-dinitrotoluene	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e185d7af0b
Creosote and Creosote related substances	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e187fd0b65
Substances in single-use baby diapers ¹⁵	https://echa.europa.eu/registry-of-restriction-intentions/- /dislist/details/0b0236e1840698d5

Restriction cases recently decided

Restriction cases for which, following the publication of the first Restrictions Roadmap of April 2022, a decision has been taken to amend the list of restrictions in Annex XVII to REACH or a Commission Decision to close a restriction has been adopted.

Restriction case	Decision	Link to the RoI
Octamethylcyclotetrasiloxane (D4); Decamethylcyclopentasiloxane (D5); dodecamethylcyclohexasiloxane (D6)	Voted in REACH Committee – under scrutiny by EU Parliament and Council	https://echa.europa.eu/registry-of-restriction- intentions/-/dislist/details/0b0236e181a55ade

¹³ 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'^M) covering any of its individual anti- and synisomers or any combination thereof.

¹⁴ The Commission intends to restrict dechlorane plus via Regulation (EU) 2019/1021 on persistent organic pollutants.

¹⁵ No restriction will be adopted based on this restriction case.

Microplastics	Commission Regulation (EU) 2023/2055 of 25 September 2023	https://echa.europa.eu/registry-of-restriction- intentions/-/dislist/details/0b0236e18244cd73
Lead and its compounds in PVC	Commission Regulation (EU) 2023/923 of 3 May 2023	https://echa.europa.eu/registry-of-restriction- intentions/-/dislist/details/0b0236e180a40af7
Formaldehyde and formaldehyde releasers	Commission Regulation (EU) 2023/1464 of 14 July 2023	https://echa.europa.eu/registry-of-restriction- intentions/-/dislist/details/0b0236e182439477
Cobalt carbonate; cobalt di(acetate); cobalt dichloride; cobalt dinitrate; cobalt sulphate	Commission Decision of 8.4.2022 to terminate the restrictions process	https://echa.europa.eu/registry-of-restriction- intentions/-/dislist/details/0b0236e181d575c8
Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds	Regulation (EU) 2022/2400 of 23 November 2022 and Commission Delegated Regulation (EU) 2023/1608 of 30 May 2023	https://echa.europa.eu/registry-of-restriction- intentions/-/dislist/details/0b0236e1827f87da
	(Listed under the Stockholm Convention and listed under the POPs Regulation)	
Undecafluorohexanoic acid (PFHxA), its salts and related substances		https://echa.europa.eu/registry-of-restriction- intentions/-/dislist/details/0b0236e18323a25d

Annex II – Groups of substances under assessment with a restriction as a potential regulatory management option

Annex II lists substances that are under assessment with restrictions as a potential regulatory management option. For the time being, <u>no decision has yet</u> <u>been taken on whether a restriction will be prepared</u>, nor on who submits the dossier (a Member State, or ECHA on behalf of the Commission). Annex II also serves as a list for authorities to develop their priorities for future restriction dossiers. Similar as for pool 1, for some (groups of) substances classification under the CLP Regulation or SVHC-identification under REACH might be the next regulatory action, which is then potentially followed by a restriction.

Substances are listed in Annex II due to different reasons. It includes (groups of) substances for which:

- ECHA's Assessment of Regulatory Needs suggests a restriction as a potential regulatory management option;
- ECHA, in accordance with Art. 69(2), identified a restriction as a regulatory follow-up action;
- Preliminary assessments of Member States, the Commission or working groups involving Member States, the Commission and ECHA suggest that a restriction could potentially be an adequate regulatory management option;
- Review reports or previous assessments indicate that revising a restriction could be necessary (e.g. lead in consumer articles; nickel in articles intended to come into direct and prolonged contact with the skin).

	Subject of potential restriction proposal	Group restriction or number of substances to be restricted	Known or potential hazards	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information
1.1	Formaldehyde and formaldehyde releasers	Group	С	A	Potential occupational risk to workers not covered by the Binding Occupational Exposure Limits (BOEL) e.g. professional and self-employed. Follow-up to review report to be

1. Substances under assessment with restrictions as a potential regulatory management option

					considered.
1.2	Lead in consumer articles	Group	R	A	Follow-up to review report not a priority due to current state of play of alternatives.
1.3	Skin sensitisers in consumer mixtures	Group	Skin Sens	С	Investigative work has begun by a group of Member States.
1.4	Hydrocarbylphenols [formerly the entry was called "Substances containing 4-tert-butylphenol (4-TBP), 4-nonylphenol and other alkylphenols"]	Group	ED, R, (PBT)	I, P, C, A	The ECHA's assessment of Regulatory Needs ¹⁶ for hydrocarbylphenols suggests restriction (potentially as a stepwise approach) for certain hydrocarbylphenol substances as such, substances containing hydrocarbylphenols as minor constituents, precursors that degrade to hydrocarbylphenols and other substances potentially relevant due to structural similarity. As a first step, it is suggested to focus on hydrocarbylphenols with confirmed environmental effects (ED ENV and/or PBT/vPvB).
1.5	Petroleum substances used in consumer and/or professional mixtures	Group	PBT, CMR	P, C	Work ongoing in PetCo. Scope to be further clarified taking into account the need for data generation, CLH, SVHC-identification or candidate listing.
1.6	Substances in fertilisers ¹⁷	Group	To be defined	I, P, C	Following the results of a COM

¹⁶ <u>https://echa.europa.eu/documents/10162/930d3b1c-e857-f744-7ba1-a1fa4a8633ad</u>
¹⁷ The new Fertilising Products Regulation identifies the REACH Regulation as the appropriate legislation to manage the chemical risks from fertilisers (unless they are PPP/biocides).

					study ¹⁸ , it may be discussed whether there is need for further regulatory action and the possible substances in scope of such action. Could include contaminants in phosphate fertilisers and possibly other substances intentionally used in fertilisers such as pyrazoles (see also entry 3.1 of Annex II).
1.7	PAHs	Group	СМ, РВТ	Ρ, C, A	ECHA's investigation report of 14 June 2023 does not recommend preparing an Annex XV restriction report on PAHs in rubber granules and mulches in loose form in domestic applications and considers that a holistic approach to PAHs would be the most effective way to regulate these substances. ¹⁹
1.8	Formamide	1	R	A	ECHA's Assessment of Regulatory Needs for aliphatic primary amides ²⁰ concluded that the substance formamide may need to be restricted in a similar way as for toys ²¹ . The substance may be released from ethylene vinyl acetate (EVA) foam articles (e.g. fitness mats, puzzle mats). The concern is specific to toys and childcare articles. Any presence of formamide in childcare articles is expected to be addressed through the upcoming restriction for CMRs in

¹⁸ Contaminants in fertilisers: Assessment of the risks from their presence and socio-economic impacts of a possible restriction under REACH. Final report, July 2021

¹⁹ <u>https://echa.europa.eu/documents/10162/17233/rest_pahs_children_investigation_report_en.pdf/51536e8a-990d-3b12-011c-51105ee30889?t=1687313125114</u>

²⁰ https://echa.europa.eu/assessment-regulatory-needs/-/dislist/details/0b0236e184fa1888

²¹ Commission Directive (EU) 2015/2115 introduced an emission limit of 20 µg/m3 after a maximum of 28 days from commencement of the emission testing of foam toy materials containing more than 200 mg/kg (cut-off limit based on content).

					childcare articles (see entry 1.1 of Annex I).
1.9	Nickel in articles intended to come in direct and prolonged contact with the skin	Group	Skin sensitiser	A	In 2019, ECHA and COM decided to discontinue the work on a guideline on Annex XVII entry 27 on nickel and its compounds. At CARACAL 29, COM expressed its intention to assess the possibility to request ECHA to review the current restriction as regards points b) and the associated point c). The risks posed by nickel in contact with the skin should be reassessed, in particular with a view to potentially modifying the scope by removing reference to direct and prolonged contact with the skin. The potential review of entry 27 on nickel and its compounds is regarded as being a low priority.
1.10	CMRs in textiles	Group	CMR		ECHA's Assessments of Regulatory Needs regularly suggest adding substances to Appendix 12 through Article 68(2), and reviewing the current concentration limits (e.g. on quinoline). This would expand the current list of substances or their limits that are restricted in textiles through entry 72 of REACH Annex XVII.
1.11	Tetrahydrofuran (THF) in consumer products	1	Carc cat. 2	С	An RMOA from Germany suggests to consider restricting THF in glues that are used by consumers indoors ²² .

²² <u>https://echa.europa.eu/assessment-regulatory-needs/-/dislist/details/0b0236e184ff4b51</u>

1.12	Substances in fibre form (excluding asbestos)	Group	Carc.		An RMOA from Germany ²³ suggests restricting fibre materials (as substances as such, in mixtures or articles) with the potential to release biopersistent fibre dusts fulfilling the WHO criteria.
1.13	Phthalic anhydrides and hydrogenated phthalic anhydrides	Group	Resp. Sens.	P, C (and I)	 Most of the substances in the group (26 out of 36) have a harmonised classification as respiratory sensitiser. ECHA's Assessment of Regulatory Needs for phthalic anhydrides and hydrogenated phthalic anhydrides²⁴ considers restriction as a potential risk management option. A possible restriction may target substances in mixtures handled by professional users and some consumer uses (e.g. bi-component adhesives, hardener for epoxy resins.
1.14	Photoinitiators	Group	R	P, C, A	4 substances with CLH cover most of the current volumes (further substances may be included but need CLH first). ECHA's Assessment of Regulatory Needs for photoinitiators (benzoyl radical precursor type) ²⁵ considers that possible restriction may target professional uses and the presence in articles reported for several substance due to use in e.g.

²³ <u>https://echa.europa.eu/assessment-regulatory-needs/-/dislist/details/0b0236e18710685c</u>

 ²⁴ https://echa.europa.eu/documents/10162/99969b23-7386-fb46-7750-181edcada32c
 ²⁵ https://echa.europa.eu/documents/10162/7adae490-e51f-a473-8040-49af5fb5d155

					coatings and paints, inks and toners, and paper and board treatment products.
1.15	Branched carboxylic acids and their salts (2- ethylhexanoic acid and salts + other acids and salts with reprotox properties)	Group	R	I, P, (C), A	2-ethylhexanoic acid and its salts already have CLH for Repr. 1B (covering 16 group members) and 3,5,5-trimethylhexanoic acid and its salts have a CLH intention for Repr. 1B (covering 5 group members).ECHA's Assessment of Regulatory Needs for branched carboxylic acids and their salts ²⁶ considers restriction as a potential regulatory management option, which may target certain industrial uses, professional use and articles.

2. ECHA Article 69.2

	Subject of potential restriction proposal	Group restriction or number of substances to be restricted	Hazards in scope Confirmed or [suspected hazards]	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information
2.1	Phenolic benzotriazols UV- 327, UV-350 and UV-320 ²⁷ (Entries 52-54 of Annex XIV)	Group	PBT, vPvB	A	Uses of the substance in articles. An Annex XV restriction dossier will be prepared if appropriate.

 ²⁶ <u>https://echa.europa.eu/documents/10162/2fdca7fd-9f63-e367-74e2-3799a570f892</u>
 ²⁷ The substance in entry 51 of Annex XIV (UV-328) is to be restricted via the POPs Regulation, and therefore does not need to be covered by a REACH restriction.

3. Groups where CLH or Candidate Listing to be carried out with restriction as suggested risk management

	Subject of potential restriction proposal	Group restriction or number of substances to be restricted	Potential hazards	Uses in scope Industrial (I) Professional (P) Consumer (C) Articles (A)	Additional information
3.1	Pyrazoles	Group (6)	R, ED HH, PM	P, C	The need for further regulatory risk management measures (e.g. restriction) is under discussion, focusing on their use as a fertiliser and potential reproductive, and ED HH properties as well as possible persistency and mobility. See also ECHA's Assessment of Regulatory Needs for pyrazoles ²⁸ . 3-MP (EC 215- 925-7) already has harmonised classification as Repr. 1B and proposals for CLH have been submitted for four substances ²⁹ .
3.2	Simple manganese compounds	Group (15)	R, STOT RE, Neurotox.	Р, С, А	The need for further regulatory risk management measures (e.g. combination of authorisation and restriction) is under discussion, focusing on subgroups 'Simple inorganic salts, oxides and manganese

²⁸ <u>https://echa.europa.eu/documents/10162/1d756e08-7067-c05a-9dd8-e7ea9ba8dded</u>

²⁹ EC 200-657-5 (DMP), 424-640-9, 429-130-1 (3,4-DMP) and 424-640-9.

					metal' and 'Permanganates'. Might apply to other substances in the group following steps taken to generate data in order to clarify the hazard. See also ECHA's Assessment of Regulatory Needs for Simple manganese compounds ³⁰ .
3.3	Simple vanadium compounds	Group (24)	CMR, STOT RE	I, P, C, A	Potential need for an exposure limit for workers under OSH (occupational health and safety) or restriction under discussion as well as a completion of CLH classification mainly for carcinogenicity. See also ECHA's Assessment of Regulatory Needs for Simple vanadium compounds ³¹ .
3.4	Acrylates and methacrylates	Group	Skin Sens, Resp. sens.		The need for further regulatory risk management measures (e.g. restriction) under discussion for all acrylates and methacrylates in the group that can be identified as skin sensitisers and/or respiratory sensitiser. See also ECHA's Assessment of Regulatory Needs for Acrylates and methacrylates ³² . May be covered by the 'skin sensitisers in consumer mixtures' entry above.
3.5	Imidazoles	Group	R	Ρ	ECHA's Assessment of Regulatory Needs for imidazoles ³³ considers, as

³⁰ https://echa.europa.eu/documents/10162/99534c29-54e2-8fb3-f974-e6e84cbe6359

³¹ <u>https://echa.europa.eu/documents/10162/3e442cfa-cee2-7e3b-6109-1333792ec4c4</u>

³² https://echa.europa.eu/documents/10162/8b3305a0-e778-9c1d-2561-0b85c6f77f76

³³ <u>https://echa.europa.eu/documents/10162/d34a537a-7bfc-6645-6cc4-d88353a4f2c7</u>

					first step, a completion of CLH classification for EC 210-484-7 as Repr. 1B (also further members of the group are proposed for CLH). In case of CLH classification, regulatory risks management measures may be considered for the professional uses of 3 substances (EC 206-019-2, 213- 234-5, 210-484-7), such as coatings and paints, polymer preparation (roller application, non-industrial spraying, hand mixing).
3.6	Resin and rosin acids and their derivatives	Group	R	(I), P, (C), (A)	ECHA's Assessment of Regulatory Needs for resin and rosin acids and their derivatives ³⁴ considers, as first step, completion of CLH classification for the potential reproductive toxicity of subgroups or individual substances where there is already sufficient data for classification. In case of CLH classification, regulatory risks management measures may be considered for the substances as such or in mixtures used by professionals.
3.7	Aralkylaldehydes	Group	R		CLH is ongoing for 2 substances and is suggested as a first step for several members. ECHA's Assessment of Regulatory Needs for aralkylaldehydes ³⁵ suggests to consider, in case of CLH classification, regulatory risks management measures for 7 substances as such or in mixtures used by professionals

³⁴ <u>https://echa.europa.eu/documents/10162/75af573c-6ac9-d2b2-2e04-2a61c7e22f1c</u> ³⁵ <u>https://echa.europa.eu/documents/10162/f2c7bd12-a849-1bed-b65a-677760bb7f69</u>

Annex III - Overview of REACH Article 69(2) assessments (updated on 09.02.2023)

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
01	5-tert-butyl-2,4,6-trinitro- m-xylene (Musk xylene) EC No: 201-329-4 CAS No: 81-15-2	vPvB	21 Feb. 2013	21 Aug. 2014	Completed on 12/11/2015 - <u>Screening report</u> published on ECHA website	No need for restriction.
02	4,4'-Diaminodiphenylmethane (MDA) EC No: 202-974-4 CAS No: 101-77-9	Carcinogenic (category 1B)	21 Feb. 2013	21 Aug. 2014	Completed on 12/11/2015 - <u>Screening report</u> published on ECHA website	No need for restriction.
03	Hexabromocyclododecane (HBCDD) EC No: 221-695-9, 247-148-4, CAS No: 3194-55-6 25637-99-4 alpha-hexabromocyclododecane CAS No: 134237-50-6, beta-hexabromocyclododecane CAS No: 134237-51-7 gamma-hexabromocyclododecane CAS No: 134237-52-8	PBT	21 Feb. 2014	21 Aug. 2015	Completed on 13/10/2016 - <u>Screening report</u> published on ECHA website	No need for restriction under REACH, as included in the list of POPs in the Stockholm convention ³⁷ .
04	Bis(2-ethylhexyl) phthalate (DEHP) EC No: 204-211-0 CAS No: 117-81-7	Toxic for reproduction (category 1B) ³⁸	21 Aug. 2013	21 Feb. 2015	Completed - Annex XV restriction report submitted. <u>Restriction</u> adopted (REACH Annex	Risk identified for EU produced and imported articles.
05	Benzyl butyl phthalate (BBP) EC No: 201-622-7 CAS No: 85-68-7				XVII entry 51)	

³⁶ Current progress as of 09/02/2023

³⁷ SC-6/13: Listing of hexabromocyclododecane: <u>http://chm.pops.int/TheConvention/ThePOPs/AllPOPs/tabid/2509/Default.aspx</u>

³⁸ In addition, the Candidate list has the following properties: For EC No: 204-211-0. Endocrine disrupting properties (Article 57(f) - environment) and Endocrine disrupting properties (Article 57(f) - human health) were introduced later. For EC No: 201-557-4 and EC No: 201-553-2, Endocrine disrupting properties (Article 57(f) - human health) was introduced later.

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
06	Dibutyl phthalate (DBP) EC No: 201-557-4 CAS No: 84-74-2					
07	Diisobutyl Phthalate (DIBP) EC number: 201-553-2 CAS number: 84-69-5					
08	Diarsenic trioxide EC No: 215-481-4 CAS No: 1327-53-3	Carcinogenic (category 1A)	21 Nov. 2013	21 May 2015	Completed on 25/01/2017 - <u>Screening report</u> published on ECHA website	No need for restriction.
09	Diarsenic pentaoxide EC No: 215-116-9 CAS No: 1303-28-2					
10	Lead chromate EC No: 231-846-0 CAS No: 7758-97-6	Carcinogenic (category 1B) Toxic for	21 Nov. 2013	21 May 2015	Screening Completed	Need for an Article 69(2) restriction identified.
11	Lead sulfochromate yellow (C.I. Pigment Yellow 34) EC No: 215-693-7 CAS No: 1344-37-2	reproduction (category 1A)				
12	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) EC No: 235-759-9 CAS No: 12656-85-8					
13	Tris (2-chloroethyl) phosphate (TCEP) EC No: 204-118-5 CAS No: 115-96-8	Toxic for reproduction (category 1B)	21 Feb. 2014	21 Aug. 2015	Completed on 05/04/2018 - <u>Screening report</u> published on ECHA website	Need for a restriction in articles, grouped with TCPP and TDCP – and other flame retardants. Also identified in the flame- retardants strategy as part of the organophosphorus (chlorinated phosphates).
14	2,4-Dinitrotoluene (2,4-DNT)	Carcinogenic	21 Feb. 2014	21 Aug. 2015	Completed on 16/07/2021	Risks not adequately controlled

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
	EC No: 204-450-0 CAS No: 121-14-2	(category 1B)			 <u>Screening report</u> published on ECHA website. <u>Annex XV restriction report</u> submitted. Opinion adopted. 	for consumers and professionals.
15	Trichloroethylene EC No: 201-167-4 CAS No: 79-01-6	Carcinogenic (category 1B)	21 Oct. 2014	21 April 2016	Completed on 22/02/2022 – <u>Screening report</u> published on ECHA website	No need for restriction.
16	Chromium trioxide ³⁹ EC No: 215-607-8 CAS No: 1333-82-0	Carcinogenic (category 1A) Mutagenic (category 1B)	21 March 2016	21 Sep. 2017	Screening started	-
17	Acids generated from chromium trioxide and their oligomers Group containing: Chromic acid ² EC No: 231-801-5 CAS No: 7738-94-5 Dichromic acid EC No: 236-881-5 CAS No: 13530-68-2 Oligomers of chromic acid and dichromic acid EC No: not yet assigned CAS No: not yet assigned	Carcinogenic (category 1B)				
18	Sodium dichromate ² EC No: 234-190-3 CAS No: 7789-12-0 10588-01-9	Carcinogenic (category 1B) Mutagenic (category 1B) Toxic for reproduction (category 1B)				
19	Potassium dichromate ²	Carcinogenic (category 1B)	1			

³⁹The chromium substances will all be taken as one group.

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
	EC No: 231-906-6 CAS No: 7778-50-9	Mutagenic (category 1B) Toxic for reproduction (category 1B)				
20	Ammonium dichromate ² EC No: 232-143-1 CAS No: 7789-09-5	Carcinogenic (category 1B) Mutagenic (category 1B) Toxic for reproduction (category 1B)				
21	Potassium chromate ² EC No: 232-140-5 CAS No: 7789-00-6	Carcinogenic (category 1B) Mutagenic (category 1B)				
22	Sodium chromate ² EC No: 231-889-5 CAS No: 7775-11-3	Carcinogenic (category 1B) Mutagenic (category 1B) Toxic for reproduction (category 1B)				
28	Dichromium tris(chromate) ² EC No: 246-356-2 CAS No: 24613-89-6	Carcinogenic (category 1B)	22 July 2017	22 Jan. 2019		
29	Strontium chromate ² EC No: 232-142-6 CAS No: 7789-06-2	Carcinogenic (category 1B)	1			
30	Potassium hydroxyoctaoxodizincatedichromate ² EC No: 234-329-8 CAS No: 11103-86-9	Carcinogenic (category 1A)	1			
31	Pentazinc chromate octahydroxide ²	Carcinogenic (category 1A)]			

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
	EC No: 256-418-0 CAS No: 49663-84-5					
23	Formaldehyde, oligomeric reaction products with aniline (technical MDA) EC No: 500-036-1 CAS No: 25214-70-4	Carcinogenic (category 1B)	22 Feb. 2016	22 Aug. 2017	Screening started	-
24	Arsenic acid EC No: 231-901-9 CAS No: 7778-39-4	Carcinogenic (category 1A)	22 Feb. 2016	22 Aug. 2017	Completed on 14/12/2021 – <u>Screening report</u> published on ECHA website	No need for restriction.
25	Bis(2-methoxyethyl) ether (diglyme) EC No: 203-924-4 CAS No: 111-96-6	Toxic for reproduction (category 1B)	22 Feb. 2016	22 Aug. 2017	Completed on 21 February 2024 – Screening report published on ECHA website	No need for restriction.
26	1,2- dichloroethane (EDC) EC No: 203-458-1 CAS No: 107-06-2	Carcinogenic (category 1B)	22 May 2016	22 Nov. 2017	Screening started	-
27	2,2'-dichloro-4,4'- methylenedianiline (MOCA) EC No: 202-918-9 CAS No: 101-14-4	Carcinogenic (category 1B)	22 May 2016	22 Nov. 2017	Screening started	-
32	1-Bromopropane (n-propyl bromide) EC No: 203-445-0 CAS No: 106-94-5	Toxic for reproduction (category 1B)	4 Jan. 2019	4 July 2020	Completed on 21/02/2022 – <u>Screening report</u> published on ECHA website	No need for restriction.
33	Diisopentylphthalate ⁴⁰ EC No: 210-088-4 CAS No: 605-50-5	Toxic for reproduction (category 1B)	4 Jan. 2019	4 July 2020	Completed on 04/04/2022 - <u>Screening report</u> published on ECHA website	To be considered in a potential restriction proposal on Ortho- phthalates (with a backbone C4- C6) – see Annex I.
34	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7 rich ³	Toxic for reproduction				

⁴⁰ Phthalates will all be taken as one group. To be considered in the restriction proposal on ortho phthalates (Restrictions roadmap)

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
	EC No: 276-158-1	(category 1B)				
	CAS No: 71888-89-6					
35	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters ³	Toxic for reproduction				
	с ЕС No: 271-084-6	(category 1B)				
	CAS No: 68515-42-4					
36	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear ³	Toxic for reproduction				
	EC No: 284-032-2	(category 1B)				
	CAS No: 84777-06-0					
37	Bis(2-methoxyethyl) phthalate ³	Toxic for				
	EC No: 204-212-6	reproduction (category 1B)				
	CAS No: 117-82-8					
38	Dipentylphthalate ³	Toxic for reproduction				
	EC No: 205-017-9	(category 1B)				
	CAS No: 131-18-0					
39	N-pentyl-isopentylphthalate ³	Toxic for reproduction				
	EC No: —	(category 1B)				
	CAS No: 776297-69-9				-	
44	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear ³	Toxic for reproduction	27 Aug. 2021	27 Feb. 2023		
	EC No: 271-093-5	(category 1B)				
	CAS No: 68515-50-4					

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
45	Dihexyl phthalate ³ EC No: 201-559-5 CAS No: 84-75-3	Toxic for reproduction (category 1B)				
46	 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate EC No: 201-559-5³ 	Toxic for reproduction (category 1B)				
40	Anthracene oil EC No: 292-602-7 CAS No: 90640-80-5	Carcinogenic (category 1B), PBT, vPvB	4 April 2019	4 Oct. 2020	Completed on 24/05/2023 - <u>Screening report</u> published on ECHA website. <u>Annex XV restriction report</u> (Article 68(1) for the presence of PAHs in clay target submitted. Opinion adopted.	Risk related to the presence of PAHs in articles
41	Pitch, coal tar, high temp. EC No: 266-028-2 CAS No: 65996-93-2	Carcinogenic (category 1B), PBT, vPvB	4 April 2019	4 Oct. 2020	Completed on 24/05/2023 - <u>Screening report</u> published on ECHA website. <u>Annex XV restriction report</u> (Article 68(1) for the presence of PAHs in clay target submitted. Opinion adopted.	
42	 4-(1,1,3,3-Tetramethylbutyl)phenol, ethoxylated (covering well-defined substances and UVCB substances, polymers and homologues) EC No: — CAS No: — 	Endocrine disrupting properties (environment)	4 July 2019	4 Jan. 2021	Screening started <u>Call for evidence</u> launched on 21 February 2024, and running till 29 March 2024.	-

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
43	4-Nonylphenol, branched and linear, ethoxylated (substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof) EC No: — CAS No: —	Endocrine disrupting properties (environment)				
47	Trixylyl phosphate EC No: 246-677-8 CAS No: 25155-23-1	Toxic for reproduction (category 1B)	27 Nov. 2021	27 May 2023	Completed on 19/09/2023– <u>Screening</u> <u>report</u> published on ECHA website	To be considered in a potential restriction proposal on Flame Retardants – see Annex I.
48 49	Sodium perborate, perboric acid, sodium salt Sodium peroxometaborate EC No: 231-556-4 CAS No: 7632-04-4	Toxic for reproduction (category 1B)	27 Nov. 2021	27 May 2023	Completed on 21/06/2023 – <u>Screening report</u> published on ECHA website	No need for restriction.
50	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3- dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)- 5-methyl-1,3-dioxane [2] covering any of the individual stereoisomers of [1] and [2] or any combination thereof	vPvB	27 Feb.2022	27 Aug. 2023	Completed on 30/08/2023 – <u>Screening report</u> published on ECHA website	No need for restriction.
51	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) EC No: 247-384-8 CAS No: 25973-55-1	PBT, vPvB	27 May 2022	27 Nov. 2023	Completed on 17/01/2024- <u>Screening</u> <u>report</u> published on ECHA website	UV-320, UV-327 and UV-350 to be considered in a potential restriction proposal – see Annex II.
52	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327) EC No: 223-383-8 CAS No: 3864-99-1	vPvB				
53	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	vPvB				

Annex XIV Entry	Substance(s)	Intrinsic property referred to in Article 57	Latest application date	Sunset date	Current progress ³⁶	Conclusion
	EC No: 253-037-1					
	CAS No: 36437-37-3					
54	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	PBT, vPvB				
	EC No: 223-346-6					
	CAS No: 3846-71-7					
55	Tetraethyllead	Toxic for reproduction	01 Nov. 2023	01 May 2025	Not started	-
	EC No: 201-075-4	(category 1A)				
	CAS No: 78-00-2					
56	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	Carcinogenic (category 1B)	01 Nov. 2023	01 May 2025	Not started	-
	EC No: 209-218-2					
	CAS No: 561-41-1					
57	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-HPbI)	Endocrine disrupting properties	01 Nov. 2023	01 May 2025	Not started	-
58	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4- stannatetradecanoate (DOTE)	Toxic for reproduction (category 1B)	01 Nov. 2023	01 May 2025	Not started	-
	EC No: 239-622-4 CAS No: 15571-58-1					
		Toxic for				
59	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)	reproduction (category 1B)	01 Nov. 2023	01 May 2025	Not started	