



Council of the
European Union

**Brussels, 20 December 2022
(OR. en)**

16180/22

**SOC 694
EMPL 473
SAN 669**

COVER NOTE

From:	Secretary-General of the European Commission, signed by Ms Martine DEPREZ, Director
date of receipt:	16 December 2022
To:	Ms Thérèse BLANCHET, Secretary-General of the Council of the European Union

No. Cion doc.:	SWD(2022) 438 final
Subject:	COMMISSION STAFF WORKING DOCUMENT List of substances to be scientifically assessed for the purposes of Article 18a, third paragraph, of Directive (EU) 2004/37/EC on presenting an action plan to achieve new or revised occupational exposure limits values for at least 25 substances, groups of substances or process-generated substances

Delegations will find attached document SWD(2022) 438 final.

Encl.: SWD(2022) 438 final



Brussels, 16.12.2022
SWD(2022) 438 final

COMMISSION STAFF WORKING DOCUMENT

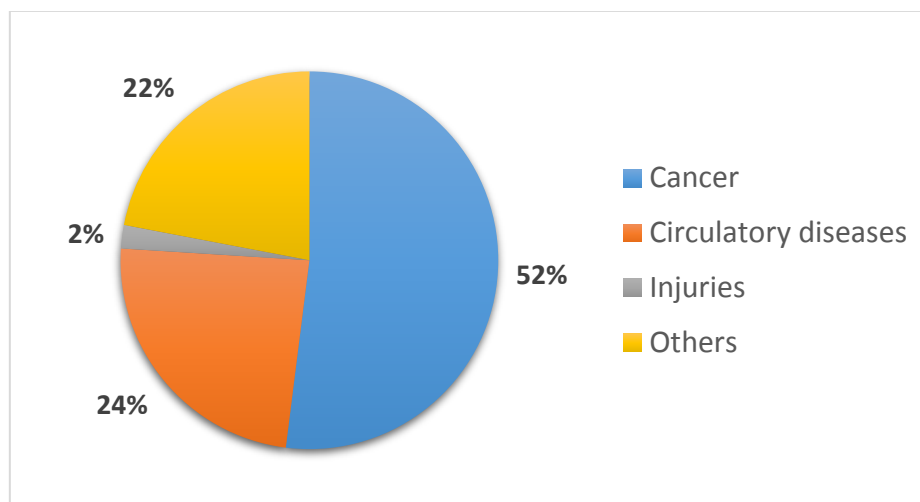
List of substances to be scientifically assessed for the purposes of Article 18a, third paragraph, of Directive (EU) 2004/37/EC on presenting an action plan to achieve new or revised occupational exposure limits values for at least 25 substances, groups of substances or process-generated substances

1. Context

Exposure to carcinogens at work can lead to serious adverse health effects, including fatalities. Cancer is the first cause of work-related death in the EU, followed by circulatory diseases¹. According to estimates, about 80 000 people in the EU pass away from cancer each year following exposure to carcinogens at the place of work².

Exposure to reprotoxic substances may also lead to serious adverse health effects, affecting sexual function and fertility, and might also cause adverse effects on the development of workers' offspring. According to some estimates, the health of about 1 200 workers could get adversely affected every year following occupational exposure to these substances. Occupational cancer and reproductive diseases also negatively affect workers' families (treatment costs, pain from seeing a member of the family suffering from serious illness, caring duties, loss of income, etc.), the national health and social protection systems, the governmental budgets and the productivity and growth of the economy. Preventing occupational cancer is therefore of utmost importance, as highlighted in the Europe's Beating Cancer Plan³.

Figure 1: Causes of work-related fatalities (%) in the EU⁴



Data source: "An international comparison of the cost of work-related accidents and illnesses", EU-OSHA 2017

The Carcinogens, Mutagens and Reprotoxic Substances Directive 2004/37/EC (CMRD) is the main EU legislative tool to ensure workers' protection against risks arising from the exposure to carcinogens, mutagens and reprotoxic substances at the place of work. In 2016, the Commission initiated a continuous revision process of the CMRD to continue improving worker protection. It is a key objective of the Commission as outlined in its new EU strategic

¹ Circulatory diseases are a group of diseases of the heart and blood vessels, including coronary heart disease, heart failure, arrhythmias, stroke, etc.

² National Institute for Public Health and the Environment (2016), *Work-related cancer in the European Union*.

³ https://ec.europa.eu/health/sites/health/files/non_communicable_diseases/docs/eu_cancer-plan_en.pdf

⁴ EU figures date from before 2021, thus including the UK

framework on health and safety at work 2021-2027⁵, and a concrete contribution to Principle 10 of the European Pillar of Social Rights⁶. The scope of this Directive, which was previously limited to carcinogens and mutagens, was enlarged in 2022 to include reprotoxic substances following the adoption of its fourth amendment⁷.

The main objective of this continuous revision process is to set new or revised occupational exposure limit values (OELs) for priority substances. So far, 41 hazardous substances were addressed through four revisions of the CMRD, mainly by setting OELs for carcinogens and transferring existing limits for reprotoxic substances from the Chemical Agents Directive 98/24/EC⁸ to the CMRD. The European Parliament, the Council and relevant stakeholders support the Commission's commitment to continuously update the CMRD. As part of its fourth revision⁹, the Commission was invited to "*present an action plan to achieve new or revised occupational exposure limit values for at least 25 substances, groups of substances or process-generated substances*". The Commission confirmed¹⁰ that this will consist of a list of the next 25 new or revised substances to be scientifically evaluated. The evaluations of the listed substances will form part of the established procedure including consultation of social partners, the opinion of the Advisory Committee on Safety and Health at Work¹¹ (ACSH) and an impact assessment preparing any necessary legislative proposals in due time.

2. CMRD - Description and revision process

All substances or mixtures that are classified (or meet the criteria for classification) as carcinogenic, mutagenic or reprotoxic (category 1A¹² or 1B¹³) according to the CLP

⁵ [EUR-Lex - 52021DC0323 - EN - EUR-Lex \(europa.eu\)](#)

⁶ Interinstitutional Proclamation on the European Pillar of Social Rights, *OJ C 428, 13.12.2017, p. 10–15*

⁷ Directive (EU) 2022/431 of the European Parliament and of the Council of 9 March 2022 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work, *OJ L 88, 16.3.2022, p. 1–14*

⁸ Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work, *OJ L 131, 5.5.1998, p. 11–23*

⁹ See footnote 5.

¹⁰ Statement of the Commission on Directive (EU) 2022/431 of the European Parliament and of the Council amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (OJ L 88, 16.3.2022, p. 1.) Action plan and legislative proposals 2022/C 121/01, *OJ C 121, 16.3.2022, p. 1-1*

¹¹ The ACSH is a tripartite body set up in 2003 by a Council Decision (2003/C 218/01) to streamline the consultation process in the field of occupational safety and health and rationalise the bodies created in this area by previous Council Decisions. The ACSH remit is to assist the Commission in the preparation, implementation and evaluation of activities in the fields of safety and health at work. The ACSH is composed of three full members per Member State, representing national governments, trade unions and employers' organisations, also organised in three separate interest groups within the Committee. (Council Decision of 22 July 2003 setting up an Advisory Committee on Safety and Health at Work, *OJ C 218, 13.9.2003, p. 1-4*)

¹² There is scientific evidence based on humans that the substance is carcinogenic, mutagenic or toxic to reproduction

¹³ There is scientific evidence based on animals that the substance is carcinogenic, mutagenic or toxic to reproduction

(classification, labelling and packaging of substances and mixtures) Regulation¹⁴ fall under the scope of the CMRD.

In addition, the CMRD allows the inclusion in its scope (through an inclusion in annex I) of substances, mixtures or process-generated substances (hereafter ‘substances’) considered as carcinogenic, mutagenic or reprotoxic by relevant international bodies (e.g. the International Agency for Research on Cancer – IARC), but not meeting the criteria for classification as a category 1A or 1B carcinogen, germ cell mutagen or reproductive toxicant set out in Annex I to CLP Regulation (e.g. diesel engine exhaust emissions).

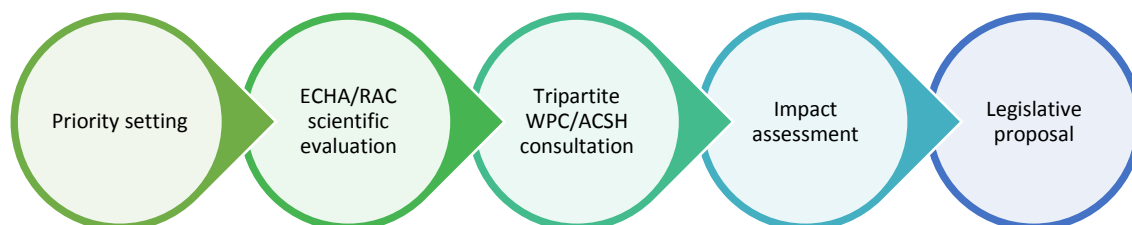
OELs and biological limit values (BLVs) are important components of the general arrangements for the protection of workers established by the CMRD. Workers cannot be exposed to levels that exceed the limit values set in the CMRD. These EU-wide limit values do not prevent Member States from setting more stringent ones in their national legislations.

Complying with the limit values is one aspect of compliance. Employers also need to comply with the other preventive and protective measures provided by the CMRD to reduce the occupational exposure to these substances. In particular, the employer has the obligation to substitute these chemicals by less or non-hazardous substances, mixtures or processes as far as technically possible. If substitution is not technically possible, other measures to prevent exposure like using a closed system (a device preventing contact between workers and hazardous chemicals) or reducing the number of workers potentially exposed have to be put in place by the employer.

The revision of the CMRD is based on a sound, comprehensive and evidence-based process, during which the consultation of the relevant stakeholders is key. This process ensures that the limit values set at EU level take account of scientific evidence, technical feasibility and socio-economic considerations.

The figure below summarizes this 5-step process starting with the prioritisation of the substances to be addressed and ending with the adoption of the legal proposal by the Commission. This 5-steps process takes on average 3 years depending on the complexity of the substances to be evaluated. Following the adoption of the legal proposal by the co-legislators, the transposition into national law then usually takes another two years.

Figure 2: simple representation of typical EU OEL setting procedure



¹⁴ Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, *OJ L 353, 31.12.2008, p. 1–1355*. The CLP Regulation is the core piece of legislation used in the EU to identify and communicate the hazardous properties of chemicals.

Step 1: Consultation of the social partners and priority setting

The selection of the substances to address is based on a consultative approach, including Member States and social partners within the ACSH, and the outcome of the formal two-stage consultation of the social partners at EU level in line with Article 154 of the Treaty on the Functioning of the European Union, which is required prior to submitting legislative proposals in this policy field.

For its subsequent revisions of the CMRD, the Commission will also duly take into account this Commission Staff Working Document (SWD) when setting priorities.

Furthermore, general considerations are also taken into consideration such as the estimated number of workers exposed, the degree of evidence for adverse effects or the potential to cause adverse health effects resulting from occupational exposure.

Step 2: Scientific evaluation

Sound scientific basis is essential to underpin any occupational safety and health action, particularly in relation to hazardous chemicals. The Commission is basing its proposals on scientific assessments from the Risk Assessment Committee (RAC) of the European Chemicals Agency (ECHA). The Commission may use, if assessments from this committee are not available, other independent scientific assessment sources, as long as the data is adequately robust and is in the public domain (e.g. International Agency for Research on Cancer's monographs).

The RAC procedure for the adoption of an opinion includes an external consultation of relevant stakeholders. This ensures scrutiny of the scientific evidence and methodological approach used by RAC and ensures transparency of the process.

More information on the ECHA methodology used by RAC can be found on the ECHA website: <https://echa.europa.eu/en/about-us/who-we-are/committee-for-risk-assessment>.

Step 3: Tripartite consultation of Member States and social partners

The Commission proposals for OELs, and where appropriate, BLVs and notations, also take into account scientific-technical feasibility of monitoring exposure, including the availability of suitable measurement techniques. Socio-economic and further technical feasibility factors are discussed in the Working Party "Chemicals at the Workplace" (WPC) of the ACSH in view of agreeing on draft opinions.

The ACSH discusses draft RAC Opinions (and/or other appropriate scientific evidence) and adopts a formal opinion. The adopted ACSH opinions include, where necessary, specific comments from the interest groups (government, employers and workers) which broadly reflect the principal points maintained by each interest group in the discussions of the WPC.

Step 4: Impact assessment

The impact assessment (IA) accompanying the legislative proposal takes into consideration social, economic and environmental impacts. The findings of the IA are summarised in an impact assessment report, which is presented to the Regulatory Scrutiny Board in accordance with the Better Regulation policy of the Commission.

Steps 5: Legislative proposal

After completion of the previous steps, the Commission prepares the legislative proposal which will be negotiated between co-legislators following the ordinary legislative procedure.

3. List of substances to be scientifically evaluated

This SWD has several objectives:

- Supporting the Commission's commitment to pursuing the updating of the CMRD, in particular with the prioritisation of the chemicals to be addressed in subsequent revisions and taking into account the resources available in the Commission services;
- Further enhancing the transparency of the process for setting EU-wide limit values in the area of occupational safety and health (OSH);
- Providing workers, businesses and Member States with predictability regarding which chemicals may be assessed under upcoming revisions of the CMRD;
- Improving the interface between OSH and other chemicals-related legislations (including REACH¹⁵) by providing more predictability on the chemicals to be scientifically evaluated.

The Commission's list of substances in annex to this SWD presents a list of 28 carcinogens, mutagens or reprotoxic substances which the Commission will consider as a matter of priority to be scientifically evaluated as part of the established procedure for preparing any necessary legislative proposals. This list of 28 substances in annex is based on an opinion¹⁶ adopted by the ACSH on 26 May 2021 on 'priority chemicals for new or revised exposure limit values under EU OSH legislation'. This ACSH opinion is the result of discussions within the WPC between the three interest groups on the chemicals which should be addressed as a priority through legislative proposals. The substances in annex are classified in three groups and listed in alphabetical order. The classification is done as follows:

- Substances currently covered by limit values in Annex III to the CMRD;
- Substances prioritised for the fifth and sixth revisions of the CMRD;
- Substances for which currently there is no limit value defined in the CMRD.

¹⁵ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency

¹⁶ ACSH opinion (2021) on 'priority chemicals for new or revised occupational exposure limit values under EU OSH legislation', [Doc. 006-21](#)

This list of substances does not aim to replace but complement the consultative process carried out by the Commission when setting priorities. The Commission will keep discussing with the relevant stakeholders, in particular within the ACSH via its WPC, in view of getting their views on which substances have to be addressed in priority, and may prioritise substances that are not listed in the annex in light of other relevant developments (i.e. emerging specific issues on a basis of reported evidence and expert advice, updated scientific information for a specific substance, increasing use of a specific hazardous substance).

Based on this list of substances and following the discussions with relevant stakeholders within the WPC, the Commission set the following priority actions:

- Proposing a protective limit value for lead at the beginning of 2023;
- Launching a social partner consultation on reduced limit values for welding fumes, polycyclic aromatic hydrocarbons, isoprene, and 1,4-dioxane under the CMRD in 2023;
- Proposing a protective limit value on cobalt in the CMRD in 2024.

These substances, groups of substances or process-generated substances are part of the list of substances in annex to this SWD.

Going forward, the Commission can request ECHA to prepare the scientific opinions underpinning the limit values and any necessary notations for 3-5 substances every year, based on a framework service level agreement with ECHA.

This list of substances does not preclude the Commission from taking initiatives to address the risks posed by other carcinogenic, mutagenic or reprotoxic chemicals that could undermine workers' health. For instance, a chemical could become more intensively used or manufactured in the future due to new technologies so that substance-specific measures in the area of OSH would have to be taken at the EU level without delay.

It is important to add that hazardous substances are not limited to carcinogens, mutagens and reprotoxins. There are other types of substances that fall under OSH legislation (e.g. Chemical Agents Directive (CAD)) that cause other types of ill-health effects (e.g. respiratory ill-health due to exposure to poorly soluble low toxicity particles¹⁷). Therefore, aside from the substances mentioned in the Annex, Commission may also work on other hazardous substances and, where appropriate, may propose specific limit values.

¹⁷ PSLTs are solid aerosol particles deposited in the lung that do not undergo rapid dissolution and clearance resulting in the lungs becoming overburdened

4. Annex

	Substance	CAS-number	CLP classification	Substance-specific regulatory framework in the OSH policy
Substances currently covered by limit values in Annex III to the CMRD which may require a revision				
1	Benzene	71-43-2	Carc. 1A Muta. 1B	Benzene is a carcinogen and mutagen, classified as Carc. 1A and Muta. 1B and falls therefore under the scope of CMRD. An OEL of 0.66 mg/m ³ (0.2 ppm) is established in the CMRD. This OEL is accompanied with a skin notation since benzene can be easily absorbed through the skin.
2	Chromium VI compounds	Several		Chromium VI compounds are substances that range from 1A to 1B carcinogenicity class. Some of them have also mutagenicity and reprotoxic properties. Therefore, they fall under the scope of the CMRD. An OEL of 0.005 mg/m ³ (measured as chromium) for chromium VI compounds is set in the CMRD and is accompanied with transitional limit values that are valid until 17 January 2025.
3	Diesel engine exhaust emissions	Several		Diesel engine exhaust emissions are process-generated substances considered as carcinogenic. They are included in the Annex I to the CMRD and fall therefore under its scope. An OEL of 0.05 mg/m ³ (measured as elemental carbon) is set in the CMRD and is accompanied with a transitional limit value valid until 21 February 2023 (except for underground mining and tunnel construction sectors for which the transitional value is valid until 21 February 2026).
4	Ethylene dibromide	106-93-4	Carc. 1B	Ethylene dibromide is a carcinogen, classified as 1B and falls therefore under the scope of the CMRD. An OEL of 0.8 mg/m ³ (0.1 ppm) is already established in the CMRD. This OEL is accompanied with a skin notation since the substance can be easily absorbed through the skin.
5	Respirable crystalline silica			Respirable crystalline silica is a process-generated substance considered as carcinogenic. It is included in the Annex I to the CMRD and falls therefore under its scope. An OEL for respirable crystalline silica is already established in the

	Substance	CAS-number	CLP classification	Substance-specific regulatory framework in the OSH policy
				<p>CMRD: 0.1 mg/m³ (respirable fraction).</p> <p>Furthermore, the European Parliament and the Council agreed as part of the fourth revision of the CMRD that the need to modify this limit value shall be evaluated as part of the next evaluation of the implementation of the CMRD. In addition, the ACSH adopted an opinion¹⁸ on 30 November 2022, in which it recommends the Commission to carry out a study in order to evaluate the impacts of the possible future limit value of 0.05 mg/m³ for respirable crystalline silica.</p>
Substances prioritised for the fifth and sixth revisions of the CMRD				
6	Lead and its compounds	Several		<p>Lead and its compounds (hereafter lead) are an occupational reprotoxicant that can affect sexual function and fertility. Lead can also lead to neurotoxicity, renal toxicity, cardiovascular effects and haematological effects. Lead falls under the scope of the CMRD following the extension of its scope to reprotoxic substances, with an existing OEL of 0.15mg/m³ and a BLV of 70µg/100 ml. The level of the limit values have not been updated since 1982.</p> <p>RAC was mandated by the Commission to prepare a scientific opinion in which it would assess the scientific relevance of occupational exposure limits for lead. This opinion¹⁹ was adopted by consensus on 11 June 2020. The ACSH adopted an opinion on lead on 24 November 2021²⁰.</p>

¹⁸ ACSH opinion (2022) on ‘an EU Binding Occupational Exposure Limit Value for Respirable Crystalline Silica under the Directive on the protection of workers from the risks related to exposure to carcinogens, mutagens or reprotoxic substances at work (2004/37/EC)’, [Doc. 006-22](#)

¹⁹ Committee for Risk Assessment’s Opinion on scientific evaluation of occupational exposure limits for lead and its compounds, [ECHA/RAC/A77-O-0000006827-62-01/F](#)

²⁰ ACSH opinion (2021) on ‘an EU Binding Occupational Exposure Limit Value and Binding Biological Limit Value for Lead and its inorganic compounds under the Chemical Agents Directive 98/24/EC’, [Doc. 006-21](#)

	Substance	CAS-number	CLP classification	Substance-specific regulatory framework in the OSH policy
7	1,4-dioxane	123-91-1	Carc. 2 ²¹	<p>The Commission Regulation (EU) 2021/849 (17th adaptation to technical and scientific progress) of 11 March 2021 modified the classification of 1,4-dioxane as Carc. 2 to Carc. 1B, which consequently now falls within the scope of the CMRD. The classification as Carcinogen 1B shall apply from 17 December 2022, although it can already be used for the classification and labelling. Exposure to this substance may lead to nasal cavity and liver cancer.</p> <p>In 2009, the European Union set an indicative occupational limit value for 1,4-dioxane under another piece of legislation, the Chemical Agents Directive²². The ACSH agreed on prioritising this substance in view of reviewing its limit value in line with the latest scientific and technical data. Since 1,4-dioxane is now within the scope of the CMRD, its revised limit value will be set in the latter.</p> <p>RAC was mandated by the Commission to prepare a scientific opinion in which it will evaluate exposure to 1,4-dioxane to assess the option of an airborne OEL, other limit values (e.g. BLV) and notations. This opinion²³ was adopted by consensus on 18 March 2022.</p>
8	Cobalt and inorganic cobalt compounds (in the framework of the CMRD)	Several	Cobalt: Carc. 1B, Repr. 1B Some of the inorganic	On 8 April 2022, the Commission adopted a Decision to terminate the restriction procedure under REACH with regard to 5 cobalt compounds ²⁴ . This Decision does not propose any restriction as measure to address the risks to workers from the exposure to them and outlines that the protection of workers from the exposure to cobalt and its inorganic compounds will be addressed through the

²¹ The Commission Regulation (EU) 2021/849 (17th adaptation to technical and scientific progress) of 11 March 2021 modified the classification of 1,4-dioxane as Carc. 2 to Carc. 1B. The classification as Carcinogen 1B shall apply from 17 December 2022, although it can already be used for the classification and labelling.

²² See footnote 6.

²³ Committee for Risk Assessment's Opinion on scientific evaluation of occupational exposure limits for 1,4-dioxane, [ECHA/RAC/OEL-O-0000007101-89-01/F](https://echa.europa.eu/en/rac/opinion-on-scientific-evaluation-of-occupational-exposure-limits-for-14-dioxane)

²⁴ Cobalt sulphate, cobalt dichloride, cobalt dinitrate, cobalt carbonate and cobalt di(acetate).

	Substance	CAS-number	CLP classification	Substance-specific regulatory framework in the OSH policy
			cobalt compounds are classified as Carc. 1B and/or Repr. 1B	<p>CMRD.</p> <p>Furthermore, the co-legislators agreed in the fourth revision of the CMRD that the Commission sets a limit value for cobalt and inorganic cobalt compounds by no later than 31 December 2024.</p> <p>RAC was mandated by the Commission to prepare a scientific opinion in which it will evaluate exposure to cobalt and inorganic cobalt compounds to assess the option of an airborne OEL, other limit values (e.g. BLV) and notations. This opinion should be submitted to the Commission in January 2023.</p>
9	Isoprene	78-79-5	Carc. 1B	<p>Isoprene (2-methyl-(1,3) butadiene) is a carcinogen, classified as 1B according to the CLP Regulation. Consequently, it is under the scope of CMRD.</p> <p>RAC was mandated by the Commission to prepare a scientific opinion in which it will evaluate exposure to isoprene to assess the option of an airborne OEL, other limit values (e.g. BLV) and notations. This opinion²⁵ was adopted by consensus on 18 March 2022.</p>
10	Polycyclic Aromatic Hydrocarbons		Some of them are classified as carcinogenic, mutagenic or reprotoxic 1A or 1B	<p>PAHs present in coal soot, coal tar or coal pitch are already included in the Annex I to the CMRD and fall therefore within its scope. Furthermore, certain PAHs mixtures, particularly those containing benzo[a]pyrene, meet the criteria for classification as carcinogenic (category 1A or 1B) and fall therefore within the scope of the CMRD. Since PAHs mixtures can be easily absorbed through the skin, a skin notation was established in the CMRD for these substances, particularly those containing benzo[a]pyrene, which are carcinogens within the</p>

²⁵ Committee for Risk Assessment's Opinion on scientific evaluation of occupational exposure limits for isoprene, [ECHA/RAC/OEL-O-000007102-87-01/F](https://echa.europa.eu/en/chemicals/ocel/ocel-0-000007102-87-01/f)

	Substance	CAS-number	CLP classification	Substance-specific regulatory framework in the OSH policy
				<p>meaning of the CMRD</p> <p>In the second revision of the CMRD²⁶, the co-legislators agreed on the necessity to further investigate whether it is necessary to set in Annex III a limit value for PAHs mixtures in order to better protect workers.</p> <p>RAC was mandated by the Commission to prepare a scientific opinion in which it will identify and assess approaches to monitoring exposure to combinations of different PAHs and to recommend the most appropriate approach. This shall include a recommendation on whether an airborne OEL for benzo[a]pyrene (CAS 50-32-8) (and/or other substance(s)) is a suitable marker of overall PAHs exposure. If appropriate, an OEL(s) shall be complemented by other limit values (e.g. BLV). This opinion should be submitted to the Commission in January 2023.</p>
11	Welding fumes			<p>IARC classified welding fumes as Group 1 carcinogens, which means that they are carcinogenic to humans. However, welding fumes are process-generated substances and are therefore not classified as carcinogenic in the CLP Regulation. As a consequence, they do not fall within the scope of the CMRD until they are included in the Annex I.</p> <p>ECHA was mandated by the Commission to prepare a scoping study in which it will assess and define the scope of “welding fumes and fumes from other processes such as plasma cutting and air carbon arc gouging that generate fume in a way that is similar to welding” (hereafter ‘welding fumes’) to allow for a description of the relevant processes, or sub-processes, to be included in annex I</p>

²⁶ Directive (EU) 2019/130 of the European Parliament and of the Council of 16 January 2019 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work, *OJ L 30, 31.1.2019, p. 112–120*

	Substance	CAS-number	CLP classification	Substance-specific regulatory framework in the OSH policy
				to the CMRD to ensure legal certainty of inclusion within the scope of the Directive. If appropriate, ECHA was asked to complement this by information identifying substance(s), which could be used as potential marker(s) for monitoring exposure to welding fumes. This scoping study ²⁷ was finalised on 30 November 2022.
Substances for which currently there is no limit value defined in the CMRD				
12	1,2,3-Trichloropropane	96-18-4	Carc. 1B Repr. 1B	1,2,3-Trichloropropane is carcinogenic and toxic to reproduction, classified as Carc. 1B and Repr. 1B, and falls therefore under the scope of the CMRD.
13	1,2-Dichloropropane	78-87-5	Carc. 1B	1,2-Dichloropropane is a carcinogen, classified as 1B and falls therefore under the scope of the CMRD.
14	1,2-Dihydroxybenzene (pyrocatechol)	120-80-9	Carc. 1B	1,2-Dihydroxybenzene is a carcinogen, classified as 1B and falls therefore under the scope of the CMRD.
15	2,3-Epoxypropyl methacrylate (glycidyl methacrylate)	106-91-2	Carc. 1B Repr. 1B	2,3-Epoxypropyl methacrylate is carcinogenic and toxic to reproduction, classified as Carc. 1B and Repr. 1B, and falls therefore under the scope of the CMRD.
16	2-Chloro-1,3-butadiene (Chloroprene)	126-99-8	Carc. 1B	2-Chloro-1,3-butadiene is a carcinogen, classified as 1B and falls therefore under the scope of the CMRD.
17	Anthraquinone	84-65-1	Carc. 1B	Anthraquinone is a carcinogen, classified as 1B and falls therefore under the scope of the CMRD.
18	Borates (Disodium tetraborate, anhydrous)	1330-43-4	Repr. 1B	Borates are toxic to reproduction, classified as Repr. 1B and fall therefore under the scope of the CMRD.
19	Boric oxide	1303-86-2	Repr. 1B	Boric oxide is toxic to reproduction, classified as Repr. 1B and falls therefore under the scope of the CMRD.

²⁷ [ECHA Scoping Study Report](#) for evaluation of limit values for welding fumes and fumes from other processes that generate fume in a similar way at the workplace

	Substance	CAS-number	CLP classification	Substance-specific regulatory framework in the OSH policy
20	Butanone oxime	96-29-7	Carc. 1B	Butanone oxime is a carcinogen, classified as 1B and falls therefore under the scope of the CMRD. Consideration will be given to a grouping approach to address a number of occupationally relevant oximes. This will be done in consultation with ACSH/WPC.
21	Ethylene imine (Aziridine)	151-56-4	Carc. 1B Repr. 1B	Ethylene imine is carcinogenic and toxic to reproduction, classified as Carc. 1B and Repr. 1B, and falls therefore under the scope of the CMRD.
22	N-(Hydroxymethyl) acrylamide (NMA)	924-42-5	Carc. 1B Repr. 1B	N-(Hydroxymethyl) acrylamide (NMA) is carcinogenic and toxic to reproduction, classified as Carc. 1B and Repr. 1B, and falls therefore under the scope of the CMRD.
23	N-Nitroso di-n-propylamine	621-64-7	Carc. 1B	N-Nitroso di-n-propylamine is a carcinogen, classified as 1B and falls therefore under the scope of the CMRD.
24	N-Nitrosodiethanoamine (2,2'-(Nitrosoimino)bisethanol)	1116-54-7	Carc. 1B	N-Nitrosodiethanoamine is a carcinogen, classified as 1B and falls therefore under the scope of the CMRD.
25	N-Nitrosodiethylamine (diethylnitrosamine)	55-18-5	No harmonised classification	N-Nitrosodiethylamine does not have a harmonised classification in the CLP Regulation. The classification provided by companies to ECHA in CLP notifications indicates that this substance may cause cancer.
26	N-Nitrosodimethylamine (dimethylnitrosoamine)	62-75-9	Carc. 1B	N-Nitrosodimethylamine is a carcinogen, classified as 1B and falls therefore under the scope of CMRD.
27	Silicon carbide fibres	409-21-2	Carc. 1B	Silicon carbide fibres is a carcinogen, classified as 1B and falls therefore under the scope of CMRD.
28	α -Chlorotoluene (Benzyl Chloride)	100-44-7	Carc. 1B	α -Chlorotoluene is a carcinogen, classified as 1B and falls therefore under the scope of CMRD.