



Briefing Note: Internally Lead Sheathed Cables and EU REACH

Key Messages

- Internally lead sheathed power cables are a critical part of infrastructure facilitating the EU's ambitions for energy independency, decarbonisation, and increased power grid stability, supporting Europe's growing renewable energy demands.
- Internal lead sheathing provides an effective layer of protection for high & extra high voltage underground and subsea cables, preventing water ingress and corrosion in hostile environments, imparting durability and extending lifetime.
- Offshore wind and energy infrastructure and high voltage submarine cables are applications of lead for which the European Commission has already noted there seem to be no available technically and economically feasible alternatives.
- The use of internal lead sheathing is not restricted under the EU REACH Regulation.
- Although the European Chemicals Agency identified lead as a Substance of Very High Concern ("SVHC") in 2018, REACH Authorisation Listing is very unlikely.
- There is no current indication that the EU will prescribe the substitution of internal lead sheathing in high and extra high voltage power cables via REACH.
- The European Commission stated in 2024 that it does not intend to ban the use of lead or include it the REACH Authorisation List.

Background

EU REACH Regulation

Through its registration, evaluation, authorisation and restriction processes, EU Regulation 1907/2006¹ (“EU REACH”) aims to improve the protection of human health and the environment from risks that may be posed by chemicals.

EU REACH requires industry to perform hazard and risk assessments for uses of substances it places on the EU market, with companies submitting Registration dossiers to the European Chemicals Agency (“ECHA”) demonstrating safe use.

EU authorities can use chemicals management mechanisms – REACH Restriction and REACH Authorisation – to regulate more tightly substances, uses or products which pose unacceptable or unmanageable risks to human health and / or to the environment.

REACH Restrictions are normally used to limit or ban the manufacture, placing on the market, or use of certain substances, including in finished goods, where unacceptable risks exist on an EU-wide basis.

REACH Authorisation seeks to ensure that certain Substances of Very High Concern (“SVHCs”) are progressively replaced with suitable alternative substances or technologies where they are available and are technically and economically feasible.

Lead metal and REACH Restriction

Under EU REACH, the use of lead is restricted² in specific applications such as in jewellery and in gunshot for use in or within 100 metres of wetlands. Additionally, due to its hazard classification, lead must not be supplied to the general public as a substance or in a mixture³.

EU Member States or ECHA, at the request of the European Commission, can submit REACH Restriction proposals for consideration by EU policymakers. EU authorities have proposed additional restrictions on specific applications of lead, notably projectiles for firearms and airguns, in fishing sinkers and lures for outdoor activities.

Status – internally lead sheathed cables: There is no REACH Restriction on the use of internal lead sheathing in high and extra high voltage cables currently enacted. No such REACH Restriction proposal is under consideration⁴, and no such proposal is foreseen in the EU’s latest Restriction Roadmap⁵.

Lead metal and REACH Authorisation

Substances which have been identified by the European Chemicals Agency as SVHCs may be included in the EU REACH Authorisation List (“Annex XIV”). ECHA regularly assesses its list of SVHCs to determine which ones it considers should be added to Annex XIV as a priority.

Listing of a substance in Annex XIV requires that companies apply to the European Commission for permission to continue any specific use after the “sunset” date, unless an exemption applies. Authorisation may be granted under two circumstances, either by demonstrating that the risk from using the substance is adequately controlled, or by showing that the socio-economic benefits of using the substance outweigh the risks and that there are no suitable alternative substances or technologies considering technical and economic feasibility.

Decisions to include substances in Annex XIV are taken by the European Commission, assisted by a regulatory committee composed of representatives of the EU Member States. The European Commission has discretion over which substances to include in the EU REACH Authorisation List and is not obliged to follow ECHA’s recommendations.

Status – lead metal: Lead metal is not listed in Annex XIV.

Lead metal was identified as an SVHC by ECHA in June 2018⁶. Subsequently, in April 2023, ECHA made a recommendation⁷ to the European Commission, calling for lead to be included in Annex XIV.

Responding⁸ to a Written Question to the European Parliament raised by Tomáš Zdechovský (PPE), Mr Breton (EU Commissioner for Internal Market) confirmed that “the Commission does not intend to ban the use of lead” and that it “continues assessing available risk management measures to identify remaining risks in non-regulated uses of lead and possible needs for targeted measures”. In the same response he added that “The European Chemicals Agency included lead in a recommendation on substances that should be subject to authorisation under REACH. The Commission is not obliged to follow this recommendation and does not intend to include lead in the authorisation list.”

The response confirms that the European Commission is very unlikely to use REACH Authorisation as a legislative tool to regulate the use of lead in the EU.

Conclusions

There are no EU REACH Restrictions or Authorisation requirements preventing the use of lead for power cable sheathing, and no current indications that EU policymakers would enact such measures.

The European Commission has confirmed that does not intend to ban lead, nor to include it in the EU REACH Authorisation List.

Although lead has been recommended by ECHA for inclusion in Annex XIV, the European Commission has discretion. REACH Authorisation is a chemicals management tool that is unlikely to be considered by EU policymakers to regulate lead metal.

The European transmission system operator industry highlights that internal lead sheathing continues to be the only available and proven solution to protect high and extra high voltage power cables against water ingress in a range of applications⁹.

References

- 1: 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, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
- 2: Entry 63, Annex XVII to Regulation (EC) No 1907/2006.
- 3: Entry 30, Annex XVII to Regulation (EC) No 1907/2006.
- 4: Registry of Restriction Intentions Until Outcome, European Chemicals Agency, <https://echa.europa.eu/registry-of-restriction-intentions> (URL correct at 29 July 2024).
- 5: Commission Staff Working Document Restrictions Roadmap under the Chemicals Strategy for Sustainability, <https://ec.europa.eu/docsroom/documents/49734> (URL correct at 29 July 2024).
- 6: Candidate List of Substances of Very High Concern for Authorisation, European Chemicals Agency, <https://echa.europa.eu/candidate-list-table> (URL correct at 29 July 2024).
- 7: Recommendation of the European Chemicals Agency of 12 April 2023 for the inclusion of substances in Annex XIV to REACH (List of Substances subject to Authorisation).
- 8: Answer given by Mr Breton on behalf of the European Commission to European Parliamentary question E-003016/2023(ASW), https://www.europarl.europa.eu/doceo/document/E-9-2023-003016-ASW_EN.html (URL correct at 29 July 2024).
- 9: Position Paper: The use of internal lead sheathing in power cables, ENTSO-E, November 2021, <https://www.entsoe.eu/news/2021/11/30/new-entso-e-position-paper-on-the-use-of-lead-in-power-cables/> (URL correct at 29 July 2024).