

## **Monbat Position Statement**

ADR Classification of Lead Metal Ingots

*Date: 28.08.2025*

### **Monbat**

#### **1. Background**

The international transport of dangerous goods is regulated by the ADR Agreement and aligned with the UN Model Regulations. Under ADR, environmentally hazardous substances are classified as UN 3077, Class 9, PG III if they meet aquatic toxicity criteria.

From 1 September 2025, the CLP Regulation (EC No 1272/2008), as amended by Regulation (EU) 2024/197, introduces a legally binding classification of lead metal in massive form as hazardous to the aquatic environment.

However, CLP classification does not automatically determine ADR classification. ADR requires a transport-specific assessment based on the material's form, solubility, and potential for environmental exposure during carriage.

## 2. Scientific Assessment of Lead Ingots

Independent scientific evaluations, applying the Transformation/Dissolution Protocol (T/Dp) and the Critical Surface Area (CSA) approach (UN GHS Annex 10, OECD 29), confirm that:

- Lead ingots (25–45 kg, LME-registered) are sparingly soluble in water and dissolve only extremely slowly.
- The specific surface area (SSA: 0.006–0.007 mm<sup>2</sup>/mg) of such ingots is far below the threshold values required for soluble lead concentrations to reach ecotoxicity reference values (ERVs).
- In both acute and chronic aquatic toxicity assessments, typical ingots do not release lead at levels triggering environmental hazard under ADR.

*Reference: ILA/ARCHE Guidance Document – Transport Classification of Lead Metal Ingots, 20 May 2025.*

## 3. Regulatory Alignment

- ADR: Lead metal is not listed in Table A of ADR Chapter 3.2, and massive lead ingots do not meet the criteria of UN 3077 under 2.2.9.1.10.3 ADR.
- CLP Regulation: From Sept 2025, lead metal ingots are classified as environmentally hazardous substances.
- Waste Legislation: Some EU Member States (e.g. Austria) confirm that pure lead metal ingots are not considered hazardous waste.
- Industry Alignment: Monbat's position is consistent with the International Lead Association (ILA) and major European lead producers.

## 4. Monbat Position

Based on current evidence and guidance:

1. Lead ingots in massive form (>1 mm, compact solid blocks) produced and traded by Monbat do not require classification as dangerous goods under ADR.
2. Accordingly, shipments of lead ingots by road, rail, or sea are not subject to ADR dangerous goods transport requirements.
3. Monbat's Safety Data Sheets (SDS) reflect this classification.
4. This position is consistent with scientific evidence, ILA guidance, and regulatory provisions.
5. For risk management purposes, and to accommodate stricter enforcement practices in some jurisdictions, Monbat may voluntarily apply ADR transport provisions (UN 3077, Class 9) to certain shipments. Such voluntary application does not change the underlying classification of lead ingots as non-ADR.

## 5. Disclaimer

Monbat applies this classification in good faith, based on current EU law, UN GHS methodologies, and independent dissolution and ecotoxicity studies. ADR enforcement is the responsibility of national competent authorities, and shippers and carriers are advised to confirm acceptance of this interpretation in the jurisdictions where transport occurs.

## 6. Conclusion

Monbat considers lead metal ingots in massive form to be non-ADR classified. Lead metal is not listed in ADR Table A and ingots do not meet the criteria of 2.2.9.1.10.3 ADR. This position reflects CLP 2024/197, ILA guidance, and independent scientific evidence. Where ADR provisions are applied, this is done solely on a voluntary precautionary basis and does not affect the fundamental classification.