

PRODUCT INFORMATION

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LEAD – THE FOCUS OF RESTRICTIONS

A whole range of restrictions when it comes to using lead have been introduced in recent years to protect people's health and the environment. The following summary provides an overview of the currently applicable regulations (with no claim for completeness). KS Gleitlager GmbH, as well as Rheinmetall AG, assume no liability for the correctness of the information and are not liable for any consequences derived from this.

REPRODUCTIVE TOXIC

Since 01/03/2018 lead has been bindingly categorised as Category 1A "reproductive toxic" in accordance with the CLP Regulation (EC 1272/2008). The permitted concentration limits differ according to bioavailability. For lead powder (particle size < 1mm), for example, a concentration limit of 0.03 % is set, whilst the general concentration limit of 0.3 % is currently applied for solid lead (particle size ≥ 1mm).

SPECIFIC TARGET ORGAN TOXICITY ARISING FROM REPEATED EXPOSURE

As part of a self-classification, the harm to the blood, kidneys and central nervous system (STOT RE1) caused by lead was recorded. For lead powder, the specific limit value of 0.5% applies, whilst the generic limit of 10% is applied for lead in solid form.

SUBSTANCES OF VERY HIGH CONCERN

Due to reproduction toxicity in accordance with the EU's REACH Regulation, lead has been listed as a Substance of Very High Concern (SVHC) since 27/06/2018, and is therefore a candidate for being adopted in the list of substances subject to authorisation in Annex XIV of the REACH Regulation. The aim of it being adopted is to have lead gradually replaced by alternative materials, insofar as this can be realised technically and economically (REACH Article 55).

The SVHC classification means there may be an obligation to inform and notify depending on whether the lead concentration exceeds the limit value of 0.1 %, or the annual quantity exceeds one tonne per year.

In the 10th recommendation for REACH authorisation of 05/03/2020, lead was not suggested for transfer to REACH Annex XIV (14). This means that lead is at least currently not on the list for authorisation.

HARMFUL TO THE ENVIRONMENT

Lead in powder form (particle size < 1mm) has been listed since 11/08/2020 by the Official Journal of the European Union L 261 (15th "Adaptation to Technical Progress", 15th ATP for short) as Aquatic Acute 1 (M-factor 1) and Aquatic Chronic 1 (M-factor 10). There is currently no environmental classification for lead in solid form, even if there are discussions of equal treatment. This would result in wide-ranging consequences e.g. for legislation involving hazardous incidences or transport.

LIMIT VALUE FOR LEAD IN BLOOD

In accordance with the Technical Regulations for Hazardous Substances (Technische Regel für Gefahrstoffe, TRGS) 505, which were published in Germany in the Joint Ministerial Gazette No. 26 on 04/05/2021, the new limit value for lead in the blood is 150 µg/l blood for bioavailable lead.

SCIP DATABASE

In Germany, the SCIP database of the European Chemicals Agency (ECHA) was set up on the basis of the Waste Framework Directive. It contains information on substances of very high concern in articles or in complex objects (products). From 5 January 2021, companies which provide articles containing SVHC in a concentration > 0.1 % on the EU market must submit information about these articles to the ECHA.

DRINKING WATER APPLICATIONS

The permitted concentration of lead in drinking water (parameter value) was reduced in the recast of the Directive on the quality of water for human consumption (EU 2020/2184) of 16/12/2020 from the original 10 µg/l to 5 µg/l. This means that many of the alloys that are common today will no longer be permitted for use in fittings, pipe connectors or pumps in drinking water applications after the transition period of approx. 15 years. Many companies in this segment are already advertising lead-free products and converting their production processes applicably.

CONSUMER GOODS

The upholding of exemption rules regarding lead in consumer goods such as music instruments, crosses/statues, rosaries, keys or locks is being checked. In Annex XV (15) investigation report into lead and its compounds dated 26/06/2020, the industry was recommended to gather migration data in the case of keys and locks in order to prove compliance with the migration limit values in entry 63, should the exemption regulation be lifted.

The ban on lead in fishing or in (hunting) ammunition should be completely implemented by 2023.

ROHS

The aim of the RoHS Directive (2011/65/EU) is to avoid explicitly stipulated hazardous substances in electrical and electronic devices. The maximum concentration of lead in a homogeneous material, such as a bracket or housing must not exceed 0.1 %. For copper alloys, there is currently an exemption regulation (Annex III, 6c), which permits lead content of maximum 4 %.

END OF LIFE OF VEHICLES

The recycling of motor vehicles is regulated in the ELV Directive (End of Life Vehicles, 2000/53/EC). For various products, there is generally a maximum lead limit value of 0.1 %. Due to an exemption regulation for copper alloys, the limit value for lead is currently 4 %.