

Lagermetall on REACH, RoHS and metals from conflict areas.

REACH (Registration, Evaluation, Authorisation and restriction of Chemicals)

The regulation means that all chemicals above one (1) metric ton in weight, and that has been produced either within the EU or imported must be tested in terms of health and environmental aspects.

The chemical must be registered with the new European Chemicals Agency in Helsinki, Finland. For some particularly toxic chemicals, the rules regardless of volume, and other highly toxic chemicals requires special permission from the European Chemicals Agency (e.g. carcinogens).

Unlike older EU legislation, REACH applies to all possible chemicals, both old and new.

The main purpose of the legislation is to protect human health and the environment from the risks from chemicals and to increase the EU chemicals industry's competitiveness and innovations.

Lagermetall AB and our products, semi cast bronze and slide-bearings, are currently not effected by REACH.

RoHS (Restriction Of Hazardous Substances)

RoHS is a European directive prohibiting or restricting the use of certain heavy metals and flame retardants in electrical and electronic products on the market. RoHS began to apply in the European Union on 1 July 2006. It was replaced 2 January 2013 by Directive 2011/65 / EU, also known as the RoHS 2.

RoHS limits the use of the following six substances:

- Mercury (Hg)
- Cadmium (Cd)
- Lead (Pb)
- Hexavalent Chromium (Cr⁶⁺)
- Polybrominated Biphenyls (PBB)
- Polybrominated Diphenyl Ethers (PBDE)

The maximum concentration of each substance is 1 ‰ by weight.

Lagermetall AB and our bronze products and slide bearings are not affected by RoHS directly in any way. There is currently no state regulations regarding bronzes in semi-finished form. However, some of our metal alloys has content of lead (Pb) and this can indirectly influence the company that manufactures electronic and electrical products. For these companies, we can offer Federalloy®, completely lead-free semi-cast bronze-alloys and from this material we can manufacture completely lead-free sliding elements. Please talk to our staff or find information here on our website.

Lead (Pb) or other additives are commonly used in all metals (bronze, brass, steel, etc.) to dampen friction, making the material softer, improve lubrication and enable good machining. Without lead content, or substitutes for lead, the material is very hard to process and may damage the tools.

The following bronze-, brass- and copper-alloys have lead content (Pb)

- Red metal Rg7 Occurs as an alloying component
- Tin bronze CuSn12 Occurs as an "impurity", not an alloying component
- Aluminum bronze Cu Al10 Ni5 Fe5 Occurs as an "impurity", not an alloying component
- CW 710 R (So Ms) Occurs as an "impurity", not an alloying component
- CW 713 R (So Ms) Occurs as an "impurity", not an alloying component

The following bearings and slide-elements have lead content (Pb)

- BM-LMB Occurs in small amount as component in the PTFE-layer
- WF-750 Occurs as a component in the "graphite plugs"
- LM & LMF Produced in alloy Rg7 and consequently has a lead-content
- Tension-bushing Occurs as an "impurity", not an alloying component

Our lead free bronze alloys

- Federalloy alloys, lead free bronzes. Since year 2001, and as first company in Europe, Lagermetall is able to offer totally lead free bronze-alloys (< 0.1 % Pb) that are Bismuth-based (Bi) as replacement for lead (Pb).

Bismuth (Bi) have a minor impact on the environment. If you consume large quantities of Bismuth it may cause liver injuries. Bismuth is classed as "friendly" metal in the U.S.

Bismuth (Bi), in bronze, passes the legislated limit (USA) for "purity in drink- and waste-water" acc. to NSF Standard 61, section 8 and 9.

Lagermetall AB supplies and stock (in limited amounts) Federalloy alloys, lead free bronzes, for close to fifteen (15) years back in time.

Slide bearings classed as lead free

- BF-LMB Wrapped bearing equal to BM-LMB (MoS₂ replaces PTFE)
- POM-LMB Wrapped bearing steel/sinter/ POM (Acetal)
- Sinter bronze Sintered bronzepowder, cont. **Cu** 89,5%, **Sn** 9,3%, **C** 1,2%
- FB090/FB092 Rolled bearing made from "pure" phosph. Tin bronze **Cu** 91,3% **Sn** 8,5% **P** 0,2%

Statement concerning metals from conflict areas (e.g. Congo and others)

Lagermetall AB does not concern itself with any products, semi-cast bronze or sliding elements, containing copper, tin or any other metals from "so called" conflict areas in Africa or elsewhere. We have, signed assurances, from all of our co-operative partners that they do not concern themselves with such commodities or trades. Therefore we would like to state, that as best as we have been able to investigate, we do not stock or sell products effected by the delivery ban acc. to regulations and ethics, concerning conflict areas in the world.

Lagermetall AB

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CEO

Christer Hellström