NO LEAD
LEAD-FREE

RoHS and Lead: Facts and FAQ

Exemption 6(c), deadlines and materials for valves and hydraulic components

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The rules in brief

Limit value
Lead is limited to 0.1 % by weight per homogeneous material under Directive 2011/65/EU. The directive is transposed into national law in every Member State, in Germany through the ElektroStoffV.

Equipment or component
RoHS applies to electrical and electronic equipment, not to individual pipework components. A purely hydraulic manifold is not equipment.

Exemption 6(c)
Copper alloys with up to 4 % lead. Expiry date set uniformly at 30.06.2027 by Delegated Directive (EU) 2025/2364 of 08.09.2025, Official Journal 21.11.2025.

New footnote since 01.07.2026
It applies to equipment supplied to the general public with parts accessible to children: lead release max. 0.05 µg per cm² and hour, coating effective for at least two years.

REACH applies on top
Lead has been an SVHC since 2018. Above 0.1 % in the article, the information duty under Art. 33 and the SCIP notification apply, independently of RoHS.

Documentation
Conformity assessment to EN IEC 63000. Responsibility for the declaration of conformity of the equipment rests with the equipment manufacturer.

Deadlines at a glance

21.11.2025 Delegated Directive (EU) 2025/2364 of 08.09.2025 published in the Official Journal: exemption 6(c) limited uniformly to 30.06.2027, the separate date for category 11 ended.

10.12.2025 Renewal application filed under Art. 5(5). The expiry date is suspended until the Commission decides.

01.07.2026 Footnote to 6(c) applicable. Stating conformity under 6(c) alone has not been sufficient since that date.

30.06.2027 Expiry date of exemption 6(c). If the application is refused, the exemption expires under Art. 5(6) no earlier than 12 and no later than 18 months after the decision.

Materials and RoHS status

Material	Lead content	RoHS status
CW614N / CW617N free-cutting brass	approx. 1.6 to 3.5 %	only via exemption 6(c), limited to 30.06.2027
Gunmetal CC499K CuSn5Zn5Pb2-C, the listed leaded grade	0.2 to 3.0 %	only via exemption 6(c), limited to 30.06.2027
Gunmetal CC470K CuSn4Zn2PS-C to DIN SPEC 2701	max. 0.10 %*	compliant without recourse to the exemption
CW511L-DW, lead-free our series specification	max. 0.10 %*	compliant without recourse to the exemption
CW511L-DW / CW510L-DW, low-lead standard alloy range	up to 0.2 %	above 0.1 %, admissible only via 6(c)
CW510L-DW, lead-free higher hardness, not dezincification resistant	max. 0.10 %*	compliant without recourse to the exemption
CW724R-DW, lead-free silicon brass	max. 0.10 %*	compliant without recourse to the exemption
Stainless steel V2A and V4A 1.4301, 1.4404, 1.4571	structurally lead-free	compliant without recourse to the exemption

* We supply copper alloys with lead at max. 0.10 %. Mill and material certificates as well as further certificates are provided on request. The material standards themselves permit higher contents, which is why the delivered composition is what counts. For CC470K the positive list tolerates lead up to 0.2 % as an unavoidable accompanying element; the grade is compliant without the exemption only at max. 0.1 %. Figures refer to the material level; product conformity additionally covers filler materials, surfaces and seals.

Frequently asked questions on RoHS

Answers for design, purchasing and quality assurance

1. Why is lead in brass and gunmetal an issue at all?
The RoHS Directive limits lead to 0.1 % by weight per homogeneous material. Free-cutting brass and many gunmetal grades are well above that and are currently admissible only through exemption 6(c) in Annex III, which allows up to 4 % lead in copper alloys.

2. What is the current status of exemption 6(c)?
Delegated Directive (EU) 2025/2364 of 08.09.2025, Official Journal of 21.11.2025, set the expiry date uniformly at 30.06.2027 for all equipment categories. A further renewal application was filed on time in December 2025, and the exemption stays valid until the Commission decides. If the application is refused, the exemption expires under Art. 5(6) no earlier than 12 and no later than 18 months after the decision.

3. What changed on 01.07.2026?
A footnote to 6(c) has applied since then. It covers equipment supplied to the general public whose accessible parts can be put in the mouth by children. For that equipment, 6(c) additionally requires evidence of a lead release of no more than 0.05 micrograms per square centimetre and hour and, for coated parts, effectiveness for at least two years. For all other equipment 6(c) continues to apply unchanged.

4. Does this rule out gunmetal?
No, but the choice is small. What counts is the lead content of the delivered batch: up to 0.1 % compliant without the exemption, above that only via 6(c) and there up to 4 %. For new developments and framework agreements, CC470K (CuSn4Zn2PS-C) to DIN SPEC 2701 with lead at max. 0.10 % is the variant that lasts beyond 2028.

5. Does RoHS apply to my component or to my equipment?
The equipment is what counts. Purely hydraulic manifolds and pipework components do not fall under RoHS in their own right. Once an actuator, pump, controller or heat exchanger is added, RoHS normally applies through the equipment: heat pumps usually category 1, stations usually category 11. Exceptions under Art. 2(4), for example large-scale fixed installations, need to be checked.

6. Does RoHS apply outside the EU as well?
RoHS governs placing on the EU market. Where the equipment is built makes no difference: a unit manufactured in Switzerland and sold into the EU has to meet the same requirements as one built inside the Union. Comparable national rules exist in third countries and need to be checked separately.

7. What does REACH mean in this context?
Lead is listed as a substance of very high concern. Above 0.1 % by weight in the article, the information duty along the supply chain under Art. 33 and the SCIP notification to ECHA both apply. With lead-free materials at max. 0.1 % that effort falls away.

8. Which materials are compliant without recourse to the exemption?
All materials with lead at max. 0.1 %: CW511L-DW lead-free (Pb max. 0.1 %), CW510L-DW at max. 0.10 %, CW724R-DW (CuZn21Si3P) as lead-free silicon brass, and stainless steel V2A and V4A, each with complete documentation. For castings, gunmetal CC470K (CuSn4Zn2PS-C) to DIN SPEC 2701 is added.

9. Why is CW510L-DW not our first choice?
CW510L-DW is technically feasible at lead max. 0.10 % and is listed for drinking water. Unlike CW511L-DW, however, CuZn42 is not dezincification resistant. We therefore prefer CW511L-DW for water qualities and applications that require dezincification resistance. CW510L-DW has higher hardness and can be a good project-specific alternative where the water chemistry suits and that hardness is a design advantage. The selection follows medium, temperature, pressure and approval requirements.

10. What needs attention technically during the changeover?
Lead-free and low-lead alloys machine and form differently from free-cutting brass. Thread geometry, tightness, solderability and fatigue strength all need checking. Sample while there is still time for a proper approval run.

Changed over in six steps

1. **Clarify the scope.** Assign your positions to the equipment categories and check where RoHS actually applies.
2. **Fix the material.** Selection by medium, temperature, pressure and duty.
3. **Samples and evidence.** Sampling with material certificates, certificates and declarations of conformity.
4. **Approval.** Initial sample inspection with tightness and pressure test, functional test and complete documentation under your own approval procedure.
5. **Documentation.** Update the file to EN IEC 63000 and the REACH and SCIP status.
6. **Series changeover.** Agree date, drawing status and stock run-off, without an interruption in supply.

Send us your part list. We assign your positions to suitable materials and agree samples, mill certificates and further certificates with you.

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This overview summarises the regulatory position as of October 2026 and does not replace a legal assessment of the individual case. The applicable versions of Directive 2011/65/EU, the associated delegated acts and their national transposition prevail. Responsibility for the declaration of conformity of the equipment rests with the equipment manufacturer.