



Certificate

Nº: **BAM/ZBF/007/10**

3rd Revised version



Bundesanstalt für
Materialforschung
und -prüfung

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Hereby it is confirmed by the BAM Certification Body, that the

Material beryllium-copper

of the manufacturer

EGA Master S.L.
Zorrolleta 11, Jundiz Industrial Estate
01015 Vitoria
SPAIN

meets the requirements of **BAM Standard operating procedure „StAA-NEG-005“: „StAA zur Schlagfunkenprüfung von Werkstoffpaarungen“ dated 2019-07-02** and thus the non-sparking tools made of this material are appropriate for use in potentially explosive atmospheres of zone 1 and/or 21 according to Directive 1999/92/EC of all explosion groups (I, IIA, IIB & IIC) according to ISO/IEC 80079-20-1:2017, if the terms and conditions set out in the annex to this certificate are met.

The certification is based on certification contract N° **BAM-ZBF-0004-2020-EGA dated 2020-08-26** and comprises according to standard ISO/IEC 17065:2012 a design-type test with the manufacturer's declaration of conformity (BAM Certification system I). The products certified by BAM may be labelled with the certification mark "BAM design-type tested" / "BAM Baumustergeprüft".

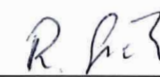
The certificate is valid until 1 August 2025.

BAM test report **20017926; BZS-GS/024/20 dated 19 February 2021** as well as procedure no. **BZS-GS/024/20** form the basis of this certificate.

Bundesanstalt für Materialforschung und -prüfung (BAM)
Unter den Eichen 87,12205 Berlin, **2021-02-23**


Dr. J. Sunderkötter
BAM Certification Officer




Dr. R. Grätz
BAM Assessor

Distribution list: 1st Certificate holder

2nd BAM Certification Body

This certificate may only be published in full wording and without any additions. A revocable written consent shall be obtained from BAM beforehand for any amended reproduction or the publication of any excerpts. The German version is legally binding, except an English version is issued exclusively. Place of jurisdiction is Berlin.

CERTIFICATE

Conditions for use of the certified material

The non-sparking tools made of the certified material beryllium-copper are appropriate for use in potentially explosive atmospheres of the zones 1 and/or 21 of all explosion groups (I, IIA, IIB & IIC), if the following terms and conditions are met:

- The material composition of this material shall comply with the material composition of the tested sample, namely:
 - o Beryllium-copper:
 - ≥ 99,0 % Cu+Be+Co+Ni+Fe, 1,8 % bis 2,3 % Be;
 - ≥ 0,2 % Co+Ni; ≤ 1,2 % Co+Ni+Fe, hardness: 283-365 HB, see letter dated January 28th, 2021
- The intended use of the tools made of the certified material shall be described by the certificate holder in such a manner that the max. absorption of mechanical energy during a possible impact of the tools on the ground does not exceed 60 Nm. This corresponds to a falling height of 10 metres of a tool with a weight of for example 6 N (approx. 600 g). This statement is valid only for a concrete quality of the following composition, used for testing in our laboratory:

Composition of the concrete: Concrete according recipe of BAM 7.4
Cement E290, flux material 5,8 %, gravel 0,1 to 0,5; 0,5 to 1,0; 1,0 to 2,0; 2,0 to 4,0;
corundum 5,0 %, steel reinforced wire; see Table 1 and Diagram 1 of the Annex of the Test report

Berlin, 2021-02-23

Place, Date



J. Summich

Signature BZS



Official statement of the BAM Certification Body (BZS) regarding the mode of operation in the framework of certification of material pairings for use in low sparking hand tools in the certification sector "Voluntary Certification" (ZBF)

In the course of 2016 the Technical Rule for general plant safety has been subject to a revision and our BAM experts have been involved in this work.

BG RCI in Germany is an authority member of the statutory accident insurance, being responsible for the chemical industry. The BG RCI regulations form an integral part of the technical rules of the Hazardous Substances Ordinance and, in Germany, they have a statutory character. The BG RCI regulations prohibit the use of tools in areas of zones 0 and 20 in case that few single sparks might occur during their application. These explanations have been integrated in the DGUV (Deutsche Gesetzliche Unfallversicherung) regulations since 2017 and BAM exclusively make reference to these specifications.

As a consequence BAM has been reviewing its practices and has come to the conclusion that, in order to improve the processes, **certification can only be granted for zone 1/21**. Our experience from former testing has shown that it is highly improbable that no sparks occur during the testing procedure and that the materials in general are appropriate for zone 1/21.

Since the use of the certified materials in zone 0/20 does not give rise to immediate risk, all the formerly issued certificates (valid until 2020) are protected and need neither to be withdrawn nor amended.

Berlin, 2018-09-10

Dr. R. Schmidt

**BAM-Zertifizierungsstelle
(BZS)**

Dr. R. Grätz