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**To whom it may concern**

Schwaebisch Hall, 11th of December 2023

## Declaration concerning PFAS (Per- and Polyfluoroalkyl Substances)

Per- and Polyfluoroalkyl Substances (=PFAS) are defined by the Organisation for Economic Co-operation and Development (=OECD) as fluorinated substances that contain at least one fully fluorinated methyl or methylene carbon atom (without any H/Cl/Br/I atom attached to it). They are called "forever chemicals" because they remain in the environment for decades or even centuries, accumulating there and thus also in the food chain. These fluorochemicals are therefore also referred to as "persistent".

**Background**: On the 13th of January 2023, Denmark, Germany, the Netherlands, Norway and Sweden submitted a restriction proposal to the European Chemicals Agency (=ECHA) on PFAS under EU REACH. The proposal covers roughly 10,000 PFAS, which is the broadest restriction proposal in history. The initiative aims to restrict PFAS in all non-essential uses. On the 22nd of March 2023, a six-month public consultation on the proposal to restrict PFAS started. The proposal stipulates that in the future the manufacture, use and placing on the market of all PFAS should be restricted. All stakeholders concerned are invited to comment on the proposal and provide relevant information. So far, it remains unclear how the proposed PFAS restriction compares to ongoing or completed restriction procedures: Perfluorooctanoic Acid (=PFOA), Perfluorooctane Sulfonates (=PFOS) and Perfluorohexanesulfonic Acid (=PFHxS) are already regulated by the Stockholm Convention on Persistent Organic Pollutants (=POP), but the procedure for restricting Perfluorohexanoic Acid (=PFHxA) under EU REACH is still ongoing. The timeline for the restriction proposal by ECHA as it stands today is set for entry into force in Q3 of 2025. If the restriction proposal would be adopted without further delays and/or changes, there will be an 18-month transition period after that - so the earliest date of effect could be in 2027. There is also a system of derogation in the proposal based on application, which can give additional adoption time.

STEGO feels obliged to keep environmental damage as low as possible and therefore evaluates its research below. Based on the feedback from its supply chain so far, STEGO, as a downstream user, has the following PFAS in various STEGO products, namely Ethene-1,1,2,2-Tetrafluoro-Homopolymer / Polytetrafluoroethylene (Preferred acronym: **PTFE**, trade name Teflon) at a concentration of less than 0.3% used in Polycarbonate as well as in other plastics. Polycarbonates have the feature of sticking to metals and therefore require demolding aid, such as PTFE (CAS # 9002-84-0), as additives. Here we are in contact with manufacturers to find alternatives. Based on our research so far, we would like to note the following outstanding characteristics of PTFE: Heat resistance from -200 to +260°C and this substance remains insoluble even with brief heating to >300°C. Due to its inertness, PTFE is insensitive to almost all chemicals. It is also resistant to substances used in the manufacturing process, such as alcohol, petrol, oil, etc. It is just as robust against all weather influences as well as ozone and oxygen. PTFE does not absorb water. In contact with open fire, PTFE will decompose and the flames will extinguish by themselves. This fluoropolymer has extremely low dielectric properties combined with a high surface and volume resistivity. It is also characterized by a high elongation at break and bending

fatigue strength as well as an extremely low coefficient of friction. The PTFE properties, such as hardness, abrasion resistance or pressure resistance, can be further improved for specific requirements using special plastic processing methods. PTFE is physiologically harmless and has not yet been classified as an SVHC (Substance of Very High Concern) according to EU REACH criteria. Nonetheless, our affected supplier has stated that he is monitoring the progress of new PFAS regulations and is looking for alternative technical solutions to meet possible new restrictions.

In addition, we use various individual strands and cores, connection cables, wire bridges and hoses made of PTFE in our products due to its excellent heat resistance. However, there are still no reliable statements from our suppliers as to the amount of PTFE used there. STEGO products are designed for the industrial sector and far from the food sector and are used according to our level of knowledge.

Raw material producers are already working in two directions when it comes to fluoropolymers. On the one hand, in the production of the monomer without fluorine-containing processing aids (surfactants) and, on the other hand, in the use of emission reduction technologies for further emission control. All major Western manufacturers of fluoropolymers are already working with both measures.

Although our other suppliers declare so far that they do not use PFAS or do not knowingly exceed any specified limit and do not intentionally add PFAS, the presence of negligible traces, due among other things to impurities in the material used in the manufacture of such compounds, is never rule out. We provide this information "AS IS" without any warranty of any kind, express or implied. We do not carry out investigations into the presence of these substances, but instead refer to the information provided by our suppliers, as in many cases standardized methods of analysis are not currently available. This statement will be modified if the participating suppliers provide new or additional information about their compliance. Please note that we are currently further evaluating our supply chain with regard to PFAS.

Sources: https://echa.europa.eu/hot-topics/perfluoroalkyl-chemicals-pfas
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32006L0122
EUR-Lex - 32019R1021 - EN - EUR-Lex (europa.eu)

***We share the opinion of "Verband der Elektro- und Digitalindustrie" (ZVEI e.V.), "Verband Deutscher Maschinen- und Anlagenbau e.V." (VDMA) and "Bundesverband der Deutschen Industrie e.V." (BDI) that the restriction of PFAS must be substance-related and risk-based (according to Article 68(1) of the EU REACH Regulation) since not all PFAS are an unacceptable risk that would warrant restriction. Products that have already been placed on the market for the first time are to be exempted from the restriction. Appropriate transitional periods are required - depending on the sector, a minimum of four to eight years seems to be advisable to protect the innovative capacity and competitiveness of Europe's industry. An option to review, extend and re-apply for exceptions must be given. A holistic approach is needed when evaluating suitable alternatives for PFAS which are necessarily applied in extreme circumstances such as high or low temperatures, high frictional resistance or aggressive chemical conditions. There should be at the beginning an introduction of an information obligation for "intentionally added" PFAS (e.g. through inclusion in the EU REACH Candidate List) over a couple of years. Fluoropolymers - to which in particular the PTFE belongs - should be excluded from the ongoing restriction process as they are already classified as "Polymers of low concern" by the OECD (→ https://www.oecd.org/env/ehs/risk-assessment/42081261.pdf) and due to their irreplaceable uses in several industrial sectors, the same with high-tech and industrial applications to foster the "green transformation". The currently proposed limit values for PFAS should be raised to the typical detection limits. In order to enable an impact assessment for the affected economy, the scope of application or the area of demarcation from other regulations must be urgently***

***clarified. Substitute materials must be developed, certified and then incorporated into end products with the same process - these costs must remain affordable so that there is no locational disadvantage.***

Please do not hesitate to contact us in case of related questions.

Best Regards,
STEGO Elektrotechnik GmbH

Elmar Mangold
CEO