Henkel Mass Balance Position

Henkel Corporate Sustainability

1. Executive Summary

Henkel commits to the use of responsibly sourced, renewable and low-emission materials to reach its environmental targets, lower its primary fossil footprint (defossilize) and work towards a circular economy. This includes the sourcing of bio-based materials, recycled materials and certified materials.

Henkel is aware that the demand for these materials, the capacity of their production facilities and the availability of their underlying feedstocks may currently be limited. A large-scale production may therefore not be possible or economically feasible and reasonable. The transition towards the global and large-scale production of materials with the desired attributes will require substantial investments in new and existing feedstock production units, production plants, logistics infrastructure as well as collection, sorting and recycling infrastructure. This transition is a long-term challenge for the industry and will require collaboration among all key stakeholders, and concrete transformation plans.

To address these challenges, Henkel supports the use of materials to which the desired attributes are allocated via a mass balance model if compliant to the criteria outlined in this position. Henkel requires the supported mass balance projects to contribute towards a sustainable transition of the industry, which is ensured by several criteria to be fulfilled by the mass balance approach applied. These necessary requirements apply to Henkel globally in all business units and for all products.

2. Background

Raw materials used for production and packaging can have different attributes, although their physico-chemical properties are the same. The attributes that can differ might exemplary be:

- Renewable carbon source (e.g. bio-based, CO_2-based or recycled) vs. fossil carbon source
- Recycled material vs. virgin material
- Sustainably sourced feedstock vs. conventionally sourced feedstock
- Lower environmental footprint, e.g. carbon footprint, compared to commonly used material

In many cases, a company aims to purchase raw materials with such attributes related to more sustainable solutions for its production to support the company's sustainability journey. Targets can be the reduction of company emissions or environmental footprints of a product, to move away from fossil feedstocks to renewable feedstocks, the transition from primary to secondary raw materials and increased circularity of material.

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To be able to produce and / or purchase raw materials with the desired attributes carried over from the initial feedstock, companies can use different chain-of-custody models. The chain-of-custody models, as defined in ISO 22095:2020, distinguish between physically segregated systems, mixed feedstock approaches (e.g. mass balance), and book and claim mechanisms.

This document will elaborate on Henkel's position on the mass balancing approach and its application in the upstream value chain (i.e., for purchased raw materials).

3. Henkel Position

Henkel aims for a complete transition towards the use of sustainable, low-emission, defossilized and renewable raw materials and packaging. Henkel advocates for a physical transformation of the chemical industry, including a gradual change of existing assets.

Henkel believes that mass balance approaches can accelerate this transition but should continuously lead to higher shares of more sustainable and renewable material. In many cases, mass balancing can support the gradual introduction of sustainable feedstocks into existing production processes without needing to overhaul infrastructure, allowing companies to scale up sustainable production more easily and cost-effectively. It also allows companies to create demand for sustainable products while building the infrastructure needed to increase the share of sustainable inputs. Accordingly, Henkel supports mass balance models as a transition method on the way to physical segregation and full industry transition towards sustainable inputs, if the right incentives are set to drive sustainable transition and defossilization. Henkel recognizes that mass balance models set higher incentives to defossilize than book and claim methods and are more feasible than segregation methods. Therefore, mass balanced material shall be used if segregated options, which are the first choice, are not available and economically feasible. Mass balanced approaches can be used in the upstream value chain (raw material and packaging purchasing) as well as in own operations for the production of finished goods, while Henkel sets the same standards for suppliers as for own operations. Henkel does not support materials produced via book and claim as sustainable material with very few exceptions, like the use of renewable energy certificates.

It needs to be assured that the used mass balance approach leads towards a physical transformation of the used production process towards sustainable material production. Therefore, Henkel requires a physical connection between input and output, a regional approach, a reasonable accounting period and a suitable certification scheme to avoid any double counting for mass balanced materials. The credibility and transition path alignment of a mass balance

project will increase if a chemical connection based on the chemical reaction equation is given, if the used technology is scalable, if a plan toward segregated production is available and if a further transition is incentivized. Henkel strives to reach these additional criteria in the future.

Henkel is aware that mass balance models can be complex. To ensure transparency and credibility to our customers, robust auditing and third-party certification schemes are used. Henkel is committed to transparent communication towards consumers and customers and to the offer of support to fully understand the method of mass balancing. Any kind of misleading claims and information for customers and consumers must be avoided. Henkel ensures that any claims made are clear and in line with certification requirements.

4. Call for Action

In order to get to a broader acceptance of mass balance, Henkel advocates for aligned, credible mass balance schemes and certifications, avoiding degrees of freedom that limit the transformatory impact of the model. Also, full transparency about physical connectivity, site specificity and the potential improvements of these properties shall be provided. Henkel engages with certification bodies and industry associations to align the requirements for mass balancing moving forward.

The shift towards a circular economy and bioeconomy is gaining ever more momentum and has turned into a priority across industries. Henkel believes that mass balance models can be the bridge to start the industrial transition towards a defossilized economy. To serve this purpose, the used mass balancing models must continuously lead to higher shares of used sustainable and renewable materials for production. In many cases, mass balancing can support the gradual introduction of renewable feedstocks, i.e. biobased, recycled or CCU (carbon capture and utilization)-derived material, into existing production processes without needing to overhaul the existing infrastructure.

Henkel believes that the transformation of the chemical sector, including the petrochemical industry as one of the largest industries relying primarily on fossil-based oil and gas, can only be achieved globally via joint efforts and national and international policies. Henkel calls for policies that enable a gradual transformation of the chemical industry by the acceptance of credible mass balance approaches for sustainable material to allow a stepwise increase of volumes. The transparency shall be given via aligned third party verification. The policies must increase the economic incentives to advance production processes towards circularity, bioeconomy, net zero and defossilization.