TECHNICAL REGULATIONS

The products manufactured at groku meet the standard requirements defined by law. groku therefore satisfies the specifications of the Consumer Goods Ordinance. The thermoplastic polypropylene (PP) used by groku in production satisfies the above-mentioned Ordinance and the connected requirements in full.

Nevertheless, the flawless use of groku products is connected to technical regulations. Damage to the filling materials, the filling machines, our products themselves or even handling problems in logistics can only be avoided, if the products are used as specified in these regulations. If the buyer does not comply with the respective regulations, groku will no longer promise the technical properties of the product. Also, the guarantee will be invalidated and no liability will be assumed for damages to the buyer or users. This disclaimer also includes damage to our product and the filling materials, as well as subsequent damage to other legal goods created by extraneous handling of the products. The technical data and regulations are integral parts of all delivery contracts.

IMPACT OF THE FILLING PROPERTIES

All containers developed and manufactured by groku Kunststoffe GmbH (groku) are designed as disposable packaging. This means that all container properties only apply when the container is filled for the first time.

In some cases, groku will absolve itself from the guarantee. This primarily refers to the following points with respect to the compatibility of the container and the filling materials:

Barrier properties
As the requirements for the use of packaging vary greatly (permeability of gases, vapours and aromas), it is not possible to make a general statement about this. Each case needs to be reviewed separately to check the extent to which barrier properties are adequate for the respective filling material.

Hot filling and freezing
Hot filling and freezing of the filling material may have a negative impact on the properties and handling of the containers. For instance, hot fillings may lead to a lower possible stacking height. In this case, the customer has a responsibility to test and verify the respective processes.

Tightness
The tightness of the containers can only be controlled to a limited extent. The responsibility for establishing and verifying suitability lies with the customer.

Aggressive media
The properties of the plastic packaging may be changed, if solvents or other aggressive media are used. Consequently, this will reduce the mechanical resistance of the containers.

TRANSPORT AND STORAGE OF FINISHED GOODS

Transport
During transportation, the containers are exposed to various loads. This includes, for instance, sliding and falling over, but also moisture, dirt and direct sunlight. For this reason, suitable load securing needs to be ensured. Suitable procedures are stated in the VDI guidelines 3968, 2700, 2702.

Storage
The plastics used by groku will tend to become brittle if exposed to UV radiation. Also, paint losses and fading of dyed items are possible. groku cannot guarantee the properties of the containers, if products are exposed to UV radiation, or if the storage temperature is too low (material becomes brittle) or too high (material becomes softer). Also, the guaranteed standard durability of the container of 6 months refers to the maximum filling weights and stacking figures when stored on a flat Euro pallet as specified in the technical data sheet. The storage temperature should be 20°C.

STORAGE / PROCESSING / DURABILITY OF EMPTY CONTAINERS

Storage
To avoid damage caused by UV radiation, the impact of direct sunlight must be avoided when storing empty containers. Also, the empty containers must be stored in a clean and dry place that is not subject to heavy temperature fluctuations. Static charging of our items is generally prevented thanks to the use of an antistatic agent; however this protection will dwindle after a storage period in excess of 6 months. Incorrect storage temperature and humidity conditions reduce or shorten the antistatic effect.

Further processing
To prevent impairment of the container properties, steps must be taken to ensure that the temperature of the container at the processing time lies between 10 - 30 °C. This is the only way that groku can guarantee the promised functions of the container. Also, groku's guarantee will not apply if notches, cuts or similar were created when the transport packaging was opened. Even superficial changes can impact on subsequent loads. We urge the use of film cutters or other cutting devices that do not damage the surface of the containers.

Product durability
Products must be processed within twelve months after delivery. Other regulations apply to hazardous goods packaging. In this case, a time period of max. five years for further processing is allowed.

Durability of In-Mould-Label (IML)
IML-processed products must be processed within 12 months at the latest. After this time, groku can no longer accept the processing risk. A warning will be issued after 9 months, if the age on the label has been reached. This allows enough time to respond. If there are any IMLs with storage periods in excess of 12 months, these are assigned to the customer

with a calculation.

Containers made of transparent PP
Containers made of transparent PP have a lower notch impact strength, and therefore it can be assumed that they are less mechanically stable. The reduced standard load for these containers means that much lower static loads are allowed during filling, transport and storage.

Recyclates and bio-plastics
These technical regulations only apply in part, if recyclates and bio-plastics are used. Unless otherwise agreed, no guarantee is offered if recyclates and bio-plastic materials are used.

FOOD HYGIENE

If containers are used to store food, groku guarantees that the products will comply with European and national specifications. Contents referring to this are stated in the declarations of conformity, and must be observed and explained in a differentiated manner in each case.

TOLERANCES

According to the technical drawing.

SHAKER SUITABILITY

Shaker suitability is generally only promised, if the pressure plate of the shaker lies flat on the container. Also, the set parameters (pressing, clamping pressure, shaking duration) must lie within the ranges suitable for containers and must be standard for the market. The extent to which containers are suitable for shakers is stated in the article specifications.