



# Technical conditions

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The correct use of our products is subject to technical conditions. Damage to our products, filling material, filling machines or in logistics can be prevented only if these conditions are complied with. In the event of non-compliance with the Technical conditions, we cannot guarantee any technical characteristics of our products, we do not give any warranty and exclude liability towards buyers or users for any damages. This disclaimer includes all damage both to our products and to the filling material as well as consequential damage to other property which can be caused by improper handling of our products. Unless otherwise agreed, our Technical data and conditions are an implicit part of delivery contracts. Only the current online version of the Technical data and conditions on our homepage is valid. We reserve the right to technical modifications. This data sheet is our property and may not be copied or made accessible to third parties without our consent.

<b>Influence of filling material</b>	Even though raw materials used by us have an excellent chemical compatibility, various chemicals can exert influence on the materials used. Therefore, filling materials can have an adverse effect on the characteristics of our plastic packagings. For example, the mechanical stability of our packages reduces as a consequence of the expanding effect of aggressive media (e.g. solvents). The resistance lists on our homepage can assist in determining the compatibility of possible filling materials with our packages. Since we cannot give any warranty for the compatibility of the container with the corresponding filling material, it is indispensable for the buyer to carry out his/her own storage and transport tests in order to verify the suitability of the container prior to purchasing product series.
<b>Mechanical stability</b>	Unless otherwise specified, the maximum filling weights and stack numbers specified in the Technical data sheet refer to the following boundary conditions: Storage temperature 20°C, storage period ½ year on horizontal and standardized euro pallets, logistics with standard lorries (no individual shipping) on roads in acceptable condition and with maximum loads according to VDI guideline 2700. The specified conditions must not be exceeded (for example, do not stack 2 pallets on top of each other). On request, we can calculate deviating storage and logistic conditions (e.g. for hot-filling or cold chain logistics, transport by sea or air, long transportation routes with poor road conditions, etc.). However, you must always carry out your own transport tests to use our containers for such conditions.
<b>Load securing</b>	Our containers are suitable for transport in vertical position and require sufficient load securing. The load securing relates to the complete loading, but in particular to individual load units (e.g. loaded single pallets) on the load floor of the transport vehicle (lorry, railway wagon etc.). Securing of the load units includes securing of the containers on the load carrier (e.g. euro pallet) against shifting, falling over, climbing and protection against humidity, dirt, direct solar radiation, mechanical damage etc. (e.g. by means of a hole-free and crease-free PE shrink film of appropriate thickness and with sufficient undershrinking). Suitable security procedures for load units are described in the VDI guideline 3968. The VDI guidelines 2700 and 2702 contain specifications about stresses during transport.
<b>Storage and further processing conditions</b>	The plastics used by us become brittle due to exposure to UV radiation and/or at low temperatures and soften at high temperatures. Exposure of coloured articles to UV radiation can cause fading of the colour or complete loss of the colour. Therefore, under the influence of UV radiation we cannot guarantee any container characteristics, and a possible suitability of containers for dangerous goods may also be lost. Thus, always avoid direct influence of UV radiation and process our products in a temperature range between 10°C and 30°C. Particularly for as long as our products have low temperatures, rough handling (pushing, hitting, throwing of the packaging units, etc.) should be avoided. Tests with shrink-wrapped pallets have shown that temperature increases within a closed film under normal room conditions by approx. 2.5°C / hour. If our packaging components are stored, for example at -10°C, it is recommended to store them before filling at least 8 hours in a room with normal temperature to reach a packaging component temperature of +10°C. In addition, our products must be stored in a clean, dry place, outdoors storage is not beneficial for our packaging components. If storage is possible only outdoors, special (UV) safety precautions with regard to the transport packaging and/or the containers (e.g. UV stabilizers) must be taken. Please ask us separately for further information. During unpacking, our products must not receive cuts or notches (not only on the surface). Polyolefins tend to break at such locations when load is applied at a later point of time. Therefore, to open transport packagings (stretch films or shrink films, cardboard packaging), use foil cutters or cutting devices which pose no risk of damage to our products and do not use knife with an open blade.
<b>Suitability for foodstuff</b>	Packages which are to be used as food contact material comply with all European and national statutory provisions. The required tests have been carried out by an accredited institute. We will be glad to provide you with a declaration of conformity.
<b>Weight</b>	The current article weights are specified on our invoices.
<b>Tolerances</b>	According to Technical drawing.
<b>Vibrator suitability</b>	A vibrator suitability is confirmed only if the vibrator pressure plate (by means of foam rubbers) has full contact with containers and the contact and clamping pressure as well as the durations of vibration are suitable for the containers and lie within standard ranges.
<b>Tightness</b>	The tightness of our containers can be adjusted within certain limits by combining a bucket with various covers. Please note that the suitability of bucket-cover combinations for your application can be tested and verified only by your own tests.
<b>Barrier properties</b>	It is your sole responsibility to test whether the barrier property of our containers is sufficient for your application. We can adjust barrier properties, if required. We cannot make general statement about the suitability of barrier properties of our containers.
<b>Use and application</b>	<p>Our products are developed and manufactured as one-way packagings. Therefore, container characteristics are achieved only during first filling. For handling filled containers, observe the legal regulations (e.g. load handling regulation or accident prevention regulations when hanging and lifting containers at the handle or the like). In case of refilling, we exclude any warranty and claims for damages.</p> <p>Containers with plastic handles are not suitable for rough handling. It is the distributor's responsibility to critically check beforehand whether they can be used for the corresponding operational environments.</p> <p>It must be assumed that containers made of transparent polypropylene, (external) reclaimed materials and bioplastics have a reduced mechanical stability and ductility. In addition, containers made of (external) reclaimed materials and bioplastics may have other limited technical characteristics. Stack numbers and contents weights specified in the Technical data cannot be used for all above mentioned materials. Suitability for your special application must be checked and verified by your own tests. Unless otherwise agreed, no warranty for containers made of the above mentioned materials is given.</p>

**Storage life**

Unless otherwise specified, our products, with the exception of packages for hazardous goods, must be processed within 12 months after they have been manufactured. German law prescribes that packages for hazardous goods can be used for a period of up to 5 years from date of manufacture, unless a shorter period of use due to the type of the substance to be transported is prescribed.

Irrespective of this, a package showing any signs of damage or reduced strength must not be used.

Further processing of in-mold labels (IML) is limited by our partners to a maximum of 12 months. Therefore, we cannot assume risk of processing after this period any more. IMLs with storage periods >12 months are handed over to our customers at a charge, our customers being informed after 9 months about possible stocks to allow sufficient time for reaction.