

Manual

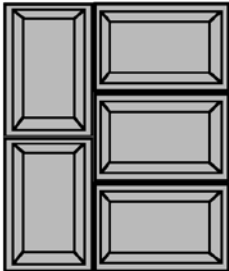
Lidded crates



The following cleaning instructions apply to all CurTec products made of polyethylene and polypropylene.

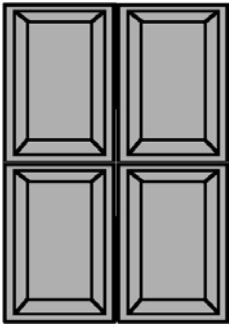
- The best results are obtained by using an industrial washing installation equipped with sprinklers or by using a so-called *Ultra-Sonic* installation.
- The most suitable detergent is a low-foam alkaline product with a pH value of 10 to 12 (in solution).
- The recommended temperature of the washing water is between 40 °C and 50 °C.
- The temperature of the rinsing water should be no higher than 65 °C.
- The washing cycle at the above temperature should last no longer than 35 seconds. The final rinse at the temperature mentioned should take at most 20 seconds. This prevents the plastic from fully heating up and displaying signs of shrinkage.
- Assisted drying of the products can be done with a cold air stream. When using heated air, assisted drying should last no longer than 30 seconds at a temperature of no more than 65 °C.
- The assisted drying and drying areas of the installation should be adapted to the product, so that poorly accessible parts of the product are also dried.
- For specific technical information, you are advised to consult the various suppliers of industrial washing installations. CurTec can offer assistance.

Note: You should regularly check the thermostats and the time settings of your equipment.

**F1**

The crates should never be put under a heavier load than prescribed in these instructions. The lidded crates should be stacked in accordance with instruction 039_UK. When stacking the crates, the weight of a stacked crate is supported by the lids of the crate below. It is essential that the four corner portions (the stacking profiles) of the lowest crate in a stack are properly supported by a pallet, spacer board or bottom board.

F1 shows the stacking of swingbar crates (600 x 400 mm) on a pallet of 1000 x 1200 mm.

**F2**

F2 shows the stacking of lidded crates (600 x 400 mm) on a pallet of 800 x 1200mm.

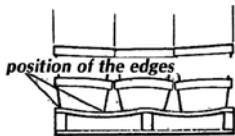
The thickness of the top deck boards on reusable pallets should be at least 20 mm. Disposable pallets should have top deck boards with a thickness of at least 15mm and should not be stacked when loaded.



Caution!!

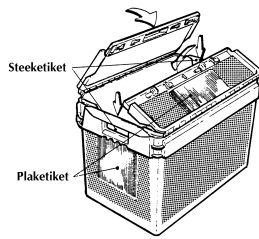
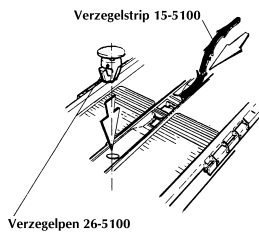
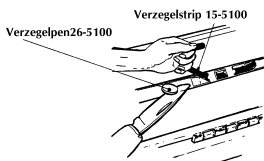
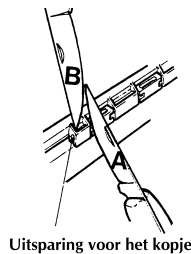
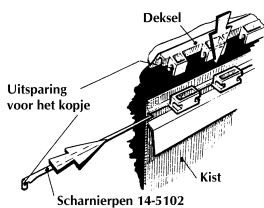
The crates should not protrude by more than 10 mm beyond the pallet. For that reason, we recommend that spacer boards are made ± 15 mm longer and wider than indicated alongside. This offers a little more leeway when stacking.

If you intend to stack crates, you should have pallets of adequate strength. With weak pallets, the crates may become distorted as illustrated in the bottom figure. As a result, the crates will not be optimally supported and the stacking load may be exceeded.



We recommend not to wrap piles of nested crates with stretch foil. Wrapping nested crates with stretch foil will cause deformation of the lids and as a consequence the lids will not close properly afterwards.

For the permissible stacking heights of crates, see the appropriate instructions.

**F1****F2****F3****F4****F5**

Before closing a lidded crate, you can place label inserts, dim. 100 x 50 mm, in the label holders. You then first close the lid marked "1", and lid "2" next. Any label inserts are now secured. See F1. The lid and sidewall have a special area to which stickers can be affixed. The stickers can easily be removed again because of the ribbed surface. The sticker area on the lid has been recessed by a few mm. This leaves adequate room for a self-adhesive document bag.

Closed lidded crates can be very easily sealed. The seal can be made with two CurTec sealing strips (15-5100) by sliding them into the appropriate holders. See F2. To break the seal, firmly grasp either end of the sealing strip. See F3. The seal is broken by a strong pull on the sealing strip. The sealing strip can now be easily removed.

It is also possible to seal CurTec lidded crates with a sealing pin (26-5100). The sealing pin should be pushed in the appropriate holes. See F2. The seal can be broken by cutting the head of the sealing pin off with a knife. See F3. The broken pins subsequently fall inside the crate making the broken seal highly visible.

Damaged lids and hinge pins are replaceable. Proceed by cutting the hinge pins between the first and second knuckle. See F4. Next, use knife point B (see F4) to cut the hinge pin again within the first knuckle. This allows you to flip the stop mechanism from the first knuckle with the knife point, after which the entire pin can be removed.

The crates have a lid marked "1" and a lid marked "2". These lids are not identical and can only be fitted to one of the sides of the crate, due to the shape of the hinges. To attach a lid, you must place the lid on the crate in the closed position. You then fasten each of the lids with two new hinge pins (14-5102). See F5. The head of the pin must end up in the corresponding recess in the hinge. This locks the hinge pin.

UN marking

The UN marking on a lidded crate is only valid when the crate is fitted with a liner with a thickness of $\geq 100 \mu\text{m}$. Besides the crate should be sealed correctly:

- with a UN strip (art. no. 5100-08) for a valid UN-X marking
- with a UN pin (art. no. 5100-09) or UN strip (5100-08) for a valid UN-Y marking

Dimensions (l x w in mm)	Stacked	Nested
5100, 5101, 5103, 5107	600 x 400	600 x 485
5102	500 x 300	500 x 360
5105, 5109	400 x 300	400 x 360
5106	800 x 400	800 x 490

The maximum load-bearing capacity of the bottom crate in a stack is dependent on:

- The number of crates in the stack
- The weight of the content of each crate
- The ambient temperature
- The time interval during which the stack is left to stand
- The surface on which the stack is placed

The table below gives a summary of some data which are important for the transport of crates, with driving time not exceeding 25 hours and at the temperature indicated.

Lidded crate >	5100	5101	5102	5103	5105	5106	5107	5109
Crate weight (kg)	4.2	3.9	2.2	3.3	1.7	4.9	3.4	1.8
Capacity (litres)	60	60	25	45	20	90	52	23
Maximum weight content (kg)	40	40	25	40	25	40	40	25
No. of stacked crates (max. height incl. pallet 2 m)	5	5	7	7	7	5	6	6
No. of nested crates (max. height incl. pallet 2 m)	17	17	20	20	20	17	20	20
Max. load on bottom crate during transport at max. 5°C (kg)	140	140	130	160	130	130	140	130
Max. load on bottom crate during transport at max. 35°C (kg)	90	90	75	110	75	80	90	75

Caution!

Crates which have been stored in a warehouse for prolonged periods under a heavy load must be restacked before they are transported by road, rail or sea. This means that the bottom crate of the stack has to become the top crate and the original top crate has to move to the bottom. If the crates are to be stored again after transport, the crates have to be restacked once more.

The weight of the crate content should be spread across the bottom as evenly as possible. Depending on the weight, the temperature and the time interval, the bottom of the crate may sag somewhat. After the crate has been emptied, the sagging will fully or partially disappear.

The table below gives a summary of the maximum load-bearing capacities of the bottom crate at the ambient temperature and time interval indicated, whilst stacked on a hard surface or on pallets.

Temp (°C)	Time (months)	5100 5101	5102 5105 5109	5103	5106	5107
≤ 0° C.	0,5	310	210	320	250	310
	1	290	200	300	240	290
	3	260	190	290	220	260
	6	240	180	270	210	240
	12	220	170	250	200	220
20° C.	0,5	210	155	225	170	210
	1	190	150	215	160	190
	3	170	140	200	150	170
	6	150	130	190	140	150
	12	140	125	180	135	140
35° C.	0,5	140	125	165	130	140
	1	130	120	150	120	130
	3	110	110	130	110	110

The above table assumes that the crates bear a maximum weight of content. If the weight of the content of the crates is lower than the maximum weight allowed, this changes the allowable stacking height. In such cases, you can calculate the load of the stack simply by using the following formula:

Maximum number of crates to be stacked =

$(\text{Max. load allowed on bottom crate}) \div (\text{weight of content} + \text{weight of crate})$

Example:

To what height can crate 5102 with a content of 11 kg be stacked at a temperature of 20°C for a period of 1 month.

Answer:

$(150) \div (11 + 2.2) = 11$ crates

- Above table assumes a maximum stacking height per pallet of 2 metres.
- The maximum stacking height should not exceed 6 metres.
- For stacks higher than 3 metres, the floor slope should not exceed 0.5%.
- In stacks of more than two pallets or higher than 4 metres, the crates should be strapped.

If stacks of crates are to be transported after long-term storage, the crates must first be restacked. This means that the bottom crate of the stack has to become the top crate and the original top crate has to move to the bottom. If the crates are to be stored again after transport, the crates have to be restacked once more.



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