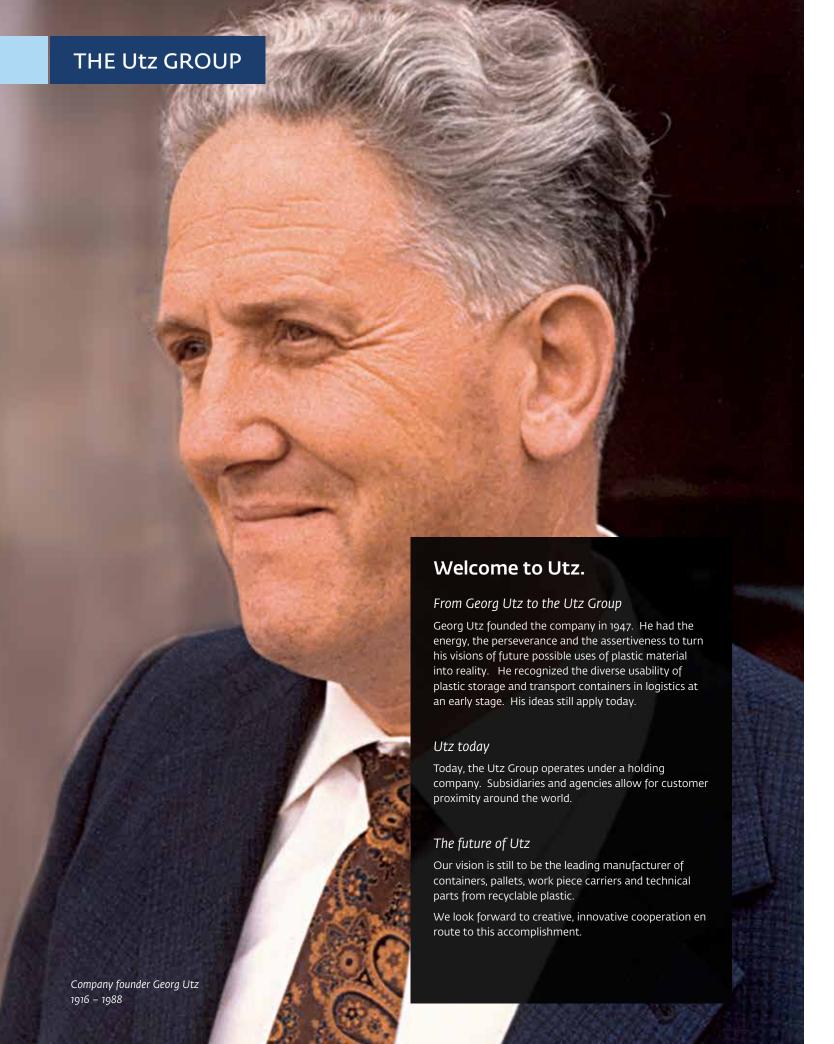


NORTH AMERICAN CATALOG

Solutions for Material Handling, Storage and Transport

The Utz Group	4
Individual Customer Solutions	18
Individual Solutions	20
Homeshopping	22
Stack Nest Totes	23
Component Holders	24
Thermoformed Component Holders	26
Injection Molded Component Holders	38
Stacking Containers	40
EUROTEC	40
SLC	48
RAKO	58
Electrostactic Discharge Products ESD	68
Bulk Containers	78
KLAPA	82
GLT	83
Pallets	84
Space Savings	92
Nestable Containers	94
Collapsible Containers	96
Foldable Containers	98
General Information	102





Board of Directors of the Georg Utz Holding AG



Axel Ritzberger

Dear reader,

On behalf of the employees of the Utz Group, I would like to thank you for taking the time to read our catalog.

No matter where you are in the world as you read these lines: There are Utz employees who can quickly be in contact with you, to advise you about the latest solutions in the Materials Handling field.

Or would you like to pay us a visit immediately on the Internet?

At www.utzgroup.com we can provide up to date information on products, technical matters, attendance at exhibitions and everything you would like to know about the Utz Group.

We look forward to receiving your enquiries at info.ch@ utzgroup.com or your visit to an exhibition.



Axel Ritzberger CEO Georg Utz Holding AG, Schweiz



Michael Chiado

Packaging is the only common element of the logistic process that is physically present in every step of your value chain. Packaging has to meet requirements for storage, transport, in-house materials handling, as well as provide protection in each of these stages.

With the influence of flexible manufacturing, the increase in product flexibility, rising quality requirements and growing demands of customers; it is easy to see the difficult challenges facing logistics professionals today.

At Georg Utz, Inc., we understand the challenges you are facing and we will work with you to arrive at the optimal solution for your processes. If you have a materials handling problem, we have the solution.

Please do not hesitate to contact us to discuss your materials handling requirements.

Michael Chiado President of Americas Georg Utz, Inc., U.S.A.

Utz WORLDWIDE

Utz WORLDWIDE



Slovakia | Slovenia | South Africa | Spain | Sweden | Thailand | Turkey



Georg Utz Inc. is a supplier of a very broad product portfolio. We manufacture two primary processes: Thermoforming and Injection Molding. As containers and component holders are frequently combined, these production options offer special advantages for the customer. One focus of our activity therefore lies on the solution specific tasks.

You can find us here.





Service and Support

Our competent sales team will advise you and analyze your requirements to develop a fast, practical and simple solution.



Project Management

Our project managers handle projects from their initial idea to their realization.



From the idea to the product, all under one roof



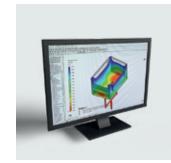
The Idea

All requirements related to the planned product are summarized in specifications within the frame-work of an extensive checklist.



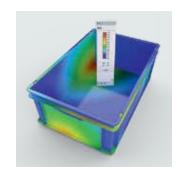
3D Display

Technical drawings from the basis of further development. This results in threedimensional displays which enable an initial introduction of the future product.



Mold Flow Analysis

Mold flow analysis provides information about the flow behavior of filling the mold. It allows tool optimization before the build.



FEA Analysis

With the aid of the FEA, virtual components can be calculated on the computer and deformations and stresses under the influence of force can be simulated.



Rapid Prototyping

Within a very short time, details of the planned product can be realized as a rapid prototype based on the technical drawing.



Model Production

In order to check whether all requirements have been met on the basis of a sample, we also can produce a model of the product at the customer's request.



Tool Construction

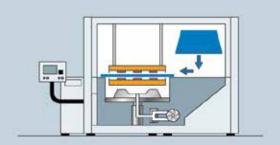
Work on the tool is done by our experts in the tool making department.



Series Production

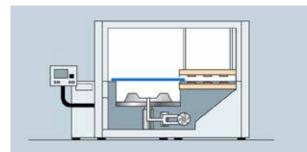
Serial production can start once the tool has been approved by the customer after sampling.





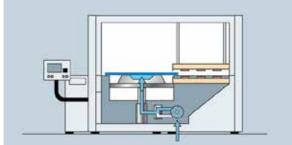
Heating process

A sheet or film consisting of thermoplastic material is tightened in a center frame and heated with a suitable heat source up to and including the plastic area.



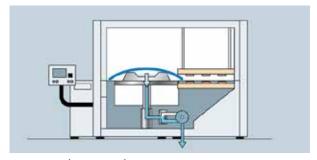
2. Start of formation

After the material has reached the predetermined temperature, the heaters are removed.



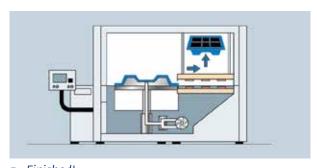
3. Formation: Creating excess pressure

The base sheet and tool are lifted. A pump creates excess pressure (pre-blowing).



4. Formation: Creating a vacuum

The heated sheet is pre-stretched by air pressure and the forming tool is driven to the pre-stretched sheet. The air between the tool and the sheet is vacuumed.



5. Finished!

The material is allowed to cool. Fans and fine water mist may be used to help cool the part evenly. After the part is cool, it is released from the mold with air assist.



THE PRODUCTION PROCESS

THERMOFORMING

Thermoforming Process

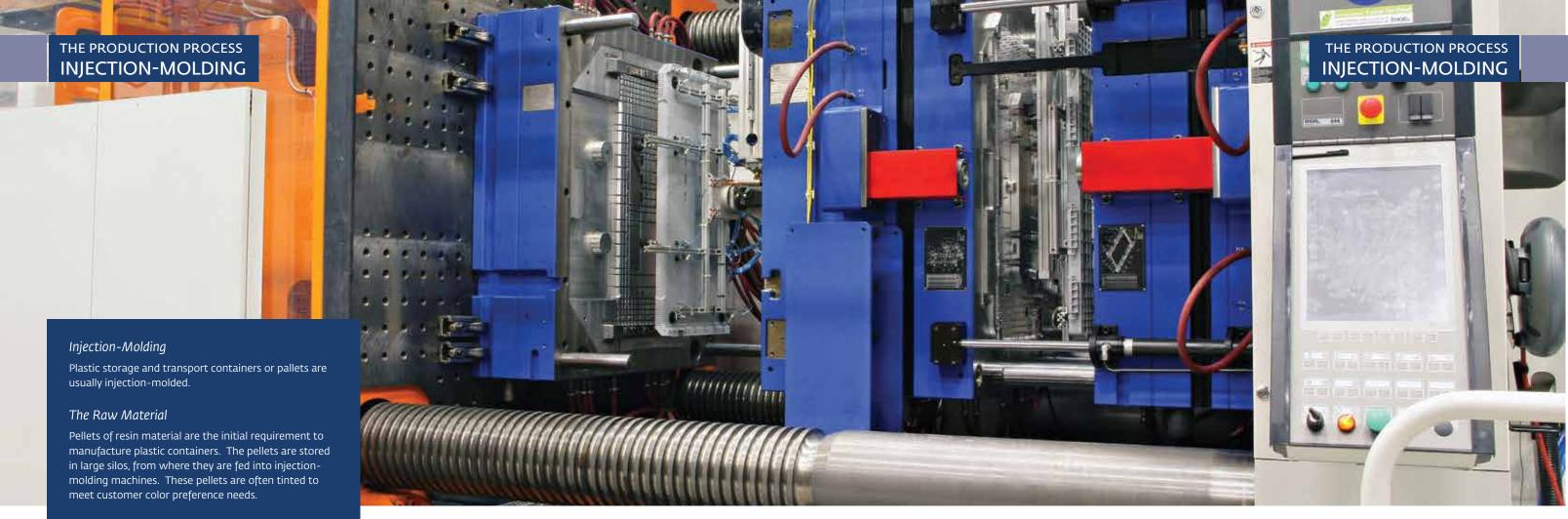
Thermoforming is a manufacturing process which reforms thermoplastic synthetics. The resulting load carriers are usually called component holders. Component holders are able to perfectly incorporate the stored products into so-called cavities.

The Raw Material

Thermoforming is a process where thermoplastic sheets are heated to a pliable forming temperature, formed to a specific shape in a mold and trimmed to create a specific part.

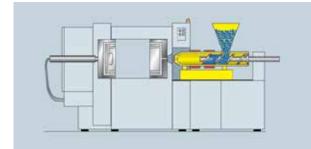
The Tool

To manufacture thermoformed component holders, a plastic plate is heated and pulled across a tool through the production of a vacuum. The plastic plate is clamped between the tool and a heating device.



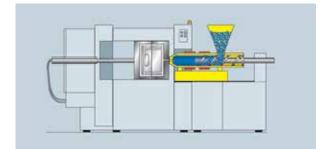
The Tool

Tool design and production was the starting point for Georg Utz and remains a core competency today. Our ability to produce high quality, flexible, state-of-the-art tooling allows us to meet the special requirements of our customers.



1. Preparing the injection process

The heated barrel is charged from a hopper feed with material in pellet form. In the heated barrel the thermoplastic is melted.



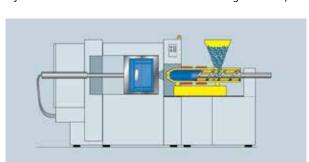
2. The injection process begins

The mold is closed within the platen arrangement and clamped using necessary force to hold the mold closed during the plastic injection cycle.



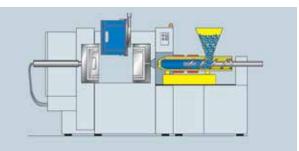
3. The injection process

The screw is driven forward under hydraulic pressure to discharge the molten plastic out of the barrel through the injection nozzle into the cavities in the molding tool itself.



4. Holding pressure and cooling

The screw is held in the forward position and a "holding" pressure is maintained on the solidifying material within the mold. Once the hold pressure phase has been terminated the mold must be closed for a set period of cooling time. During the cooling phase, the barrel is recharged with material for the next molding cycle.



5. Finished!

When the cooling phase is complete the mold is opened and the part is removed with a robot.



Recycling and UIC®







Recycling and Utz

Utz produces hundreds of thousands of new plastic boxes every year. Where do the load carriers of the previous year end up when there is such a continuous high demand? The positive answer is ... in continuous use!

What if the plastic containers or pallets have to be discarded? Utz takes these load carriers back! The containers are collected and stored in groups of identical material in the Utz Recycling Center, then moved to a company-owned compounder, in which the granulate is processed for reuse.

Utz and myclimate

We have partnered with myclimate to further our efforts toward climate protection. You can learn more about our partnership here:



Utz Industrial Compound UIC®

In its physical properties, the processed and prepared material is comparable to new material. Standard material properties are tested and documented, so that the former plastic container can be further processed following this "revitalizing treatment".

This Utz-specific alternative to the continuous production of new material from finite resources is therefore logically offered as Utz Industrial Compound (UIC®)

UIC® is a raw plastics material with documented properties and in the usual Utz quality.

Utz is ISO certified:

ISO 90001:2015



 Custom Coatings • Belts • Label Holders Handles • Dividers

Foam Inserts

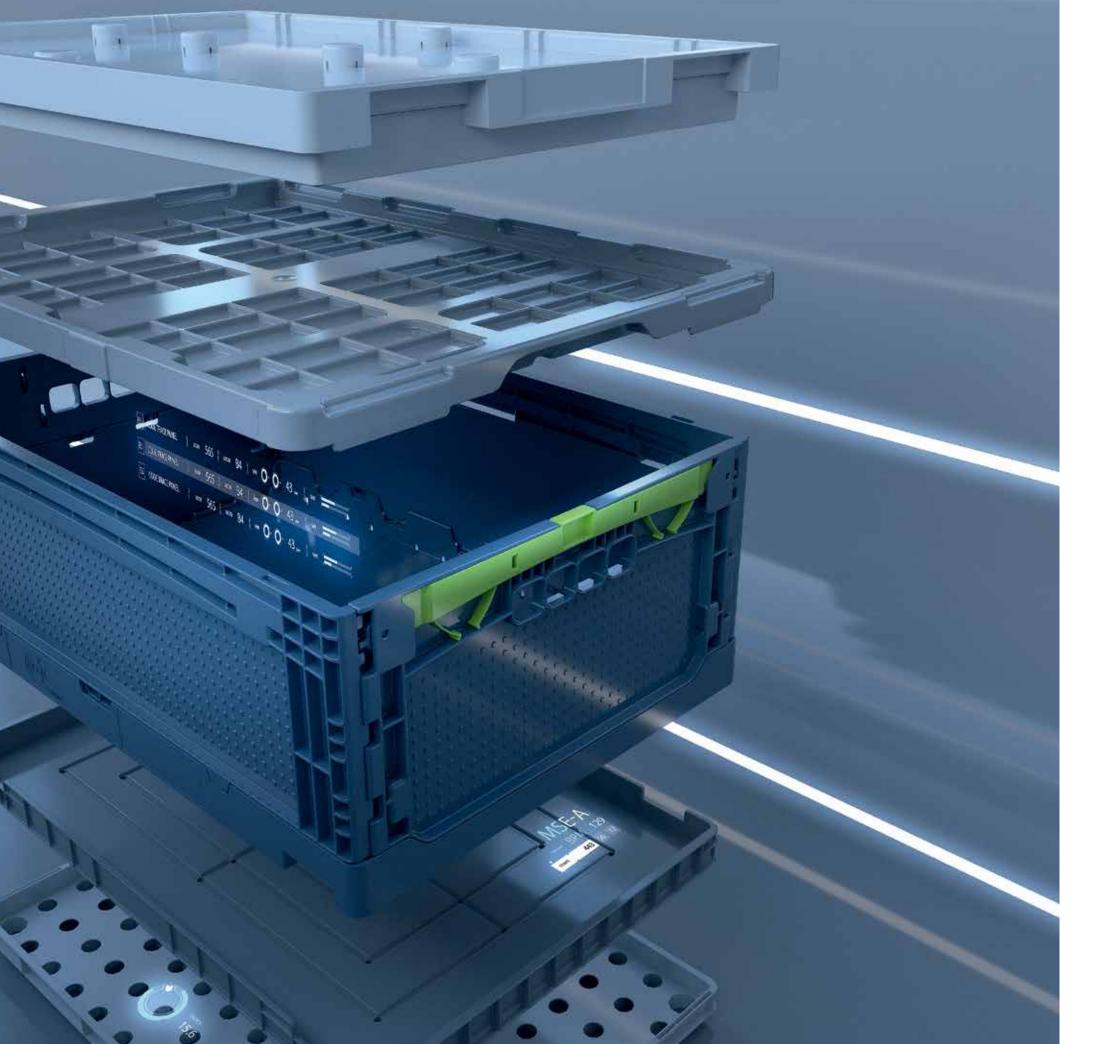
Other Customization Options

• Cut and Weld Parts

• Die Cutting Drilling

Milling

Riveting



Individual Customer Solutions

- 20 | Individual Solutions
- 22 | Homeshopping
- 23 | Stack Nest Totes

No job like another

A solution for every task

Often project requirements can be met with modification of a standard container. However, they often require new ideas and solutions.

AutoStore

Special containers offered by AutoStore for an automated storage system with grooves at the short and long walls for compartment dividers.



Perfect Pick ASRS

System specific design with various heights and reconfigurable dividers to meet a wide range of customer needs.

Medical Device Automation Tray

Transport for medical device components. Trays serve as transport vehicle and automation interface at component manufacturing and device assembly.



Stacking container for Automation

Container designed for automation and conveyor systems. Grooves injected into the internal walls are able to incorporate dividers.





Automotive

High quality ball bearings of various sizes are transported in this reusable container. Individually adjustable eccentric elements are used to fit the ball bearings securely into the container.

OSR – Tray and Bins

Tray and bin system provides transport tray with removable bin of various heights and sizes.





Homeshopping with sophisticated containers

Plastic containers for picking and transport

Home shopping in the USA is becoming part of everyday life. A key element in picking in the warehouse and transporting to the customer or back to the warehouse is a container optimally adapted to the logistical concept. Although every company involved in homeshopping has an individual approach to solving problems, many nestable keepers are used.

These tapered containers are nested together when empty, so that up to 70% space savings in the transport of the containers is possible. The upper edge of the containers are designed with notches, in which up to three shopping bags can be hung. In the shopping bags, the online orders are collected, which are then handed over to the customer at the house. The empty containers are then sent back to warehouse.



shopping bags

The notches in the upper edge allow placement for up to 3 shopping bags.



Stack Nest Totes

Totes for Any Industry

After listening to your feedback, the newly designed Utz family of stack nest totes are designed to be incredibly flexible. Made from our quality polypropylene and offering options such as a flat base, shell handles, and flat surfaces for labels, the stack nest is as versatile as you need it to be. Additionally, with 180-degree stack nest capability, you can save space in your warehouse when they're not in use. You can also stack these totes up to five high for even more agile application.

Shell Handles

• Ergonomic shell handles make for easy carrying

High-Quality Polypropylene (PP)

• Durable, high quality PP increases longevity and functionality

Label Application

• Flat surfaces for labels make it easy to match to your automation system

Base Configuration

• Engineered flat base for improved base deflection and flatness when loaded



600 x 400 x 340 mm

23.6 x 15.7 x 13.4 in

Inner dimension: 482 x 336 x 334 mm / 19.0 x 13.2 x 13.1 in

Weight: 2.0 kg / 4.4 lb Capacity: 54.0 liters / 1.9 ft³

Base Usable height 322 mm / 12.6 in

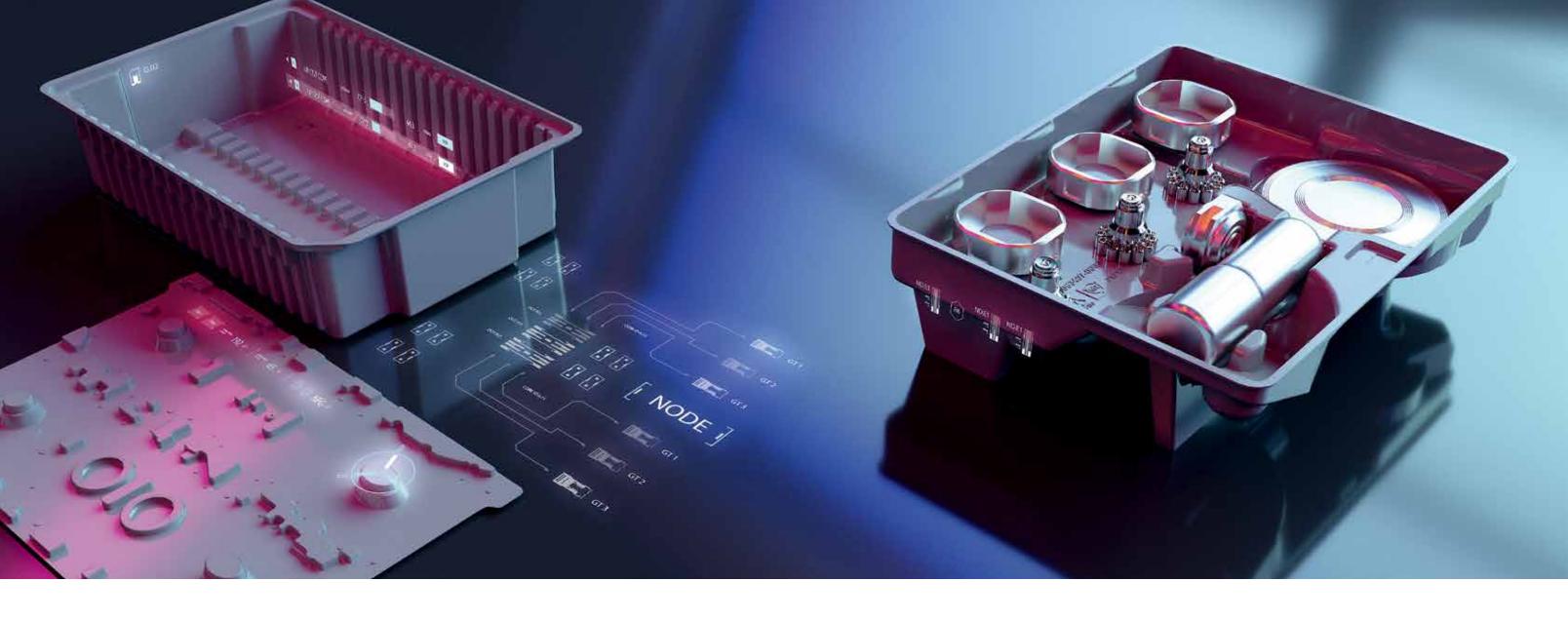
600 x 400 x 350 mm

23.6 x 15.7 x 13.8 in

Inner dimension: 490 x 333 x 338 mm / 19.3 x 13.1 x 13.3 in

Weight: 2.3 kg / 5.1 lb Capacity: 55.2 liters / 1.9 ft³

Usable height 325 mm / 12.8 in



Component Holders

- 26 | Thermoformed
- 32 | Thin Wall
- 33 | Foam
- 34 | Component Holders as Inserts
- 36 | Options
- 38 | Injection Molded Component Holders

COMPONENT HOLDERS THERMOFORMED



Trays with a precise fit

Thermoforming is a manufacturing process for forming thermoplastics synthetics. The resulting load carriers are called component holders. Component holders are able to perfectly incorporate products. There are stackable and rotary stackable component holders consisting of frame tools or as intermediate layers.

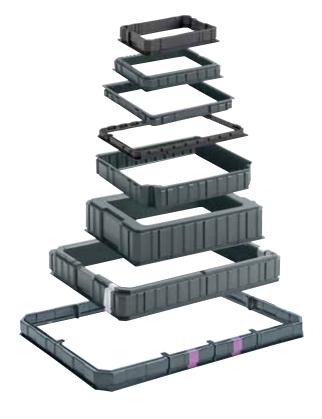
Stackable component trays from a frame tool

An individual insert tool is developed for the product being packaged and is fitted into a standardized frame tool. This way the same frame can be reused as often as required and keeps tooling cost to a minimum.









The principle of a frame tool

A frame tool refers to a style of tooling which utilizes a standard footprint with a modifiable insert. The insert can be customized to fit the part to be transported. This creates efficiency and flexibility for future part shapes and sizes.

Thermoformed Frame Trays Utz Standard Sizes

Footprint
12 x 16 in / 300 x 400 mm
15 x 12 in / 381 x 305 mm
16 x 12 in / 400 x 300 mm
24 x 15 in / 609 x 381 mm
24 x 16 in / 600 x 400 mm
24 x 20 in / 600 x 500 mm
24 x 22 in / 609 x 559 mm
32 x 24 in / 800 x 600 mm
40 x 24 in / 1000 x 600 mm
48 x 23 in / 1220 x 570 mm

Frame Tools & Automation

Automation is becoming increasingly more important in manufacturing. Current packaging solutions are difficult to convey and don't always have the necessary features to interact precisely with robotics. Unfortunately, a new line of fully customized containers can cost a supplier 10's of thousands of dollars. Therefore, Utz created a frame tool with a customizable insert in multiple heights. You get the production impact of a specialized container at a fraction of the cost.

Thermoform materials







Material:ABS TPUImpact strength:GoodAbrasion:GoodAutomated handling:ExcellentTemperature resistance:+17 to +170° F



Material: PE
Impact strength: Excellent
Abrasion: Excellent
Automated handling: Good
Temperature resistance: -50° to +175° F



Material: PETG

Impact strength: Good

Abrasion: Good

Automated handling: Excellent

Temperature resistance: -50° to +225° F



Material: PP Foam

Impact strength: Good

Abrasion: Excellent

Automated handling: Fair

Temperature resistance: +32° to +225° F



Material: PSEL
Impact strength: Good
Abrasion: Good
Automated handling: Excellent
Temperature resistance: -4° to +140° F





Component trays can be designed to be stacked on top of each other resulting in more products to be stored on the same footprint. Fragile components stored in stacked component trays are protected from dust and dirt.

COMPONENT HOLDERS

THERMOFORMED





High efficiency stackable carriers

Stackable component trays with stand-offs for gears with different diameters.



Stackable component trays made out of electro-conductive polystyrene.



Stackable component trays with recessed handles.



Stackable component trays with color stripe for visual identification of contents.

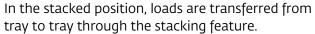


Stackable component trays for pharmaceutical use with optional lid.

Stackable- nestable

Component trays can be designed to be stacked on top of each other resulting in more products to be stored on the same footprint. Fragile components stored in stacked component trays are protected from dust and dirt.







Trays in the nested position when empty.

Interlayer trays

Cavities on top of the interlayer component tray are designed for the part it is to carry. The bottom side of the tray is then designed so that the tray will interface with the parts below. The upper tray transfers loads through the appropriate part surface below.

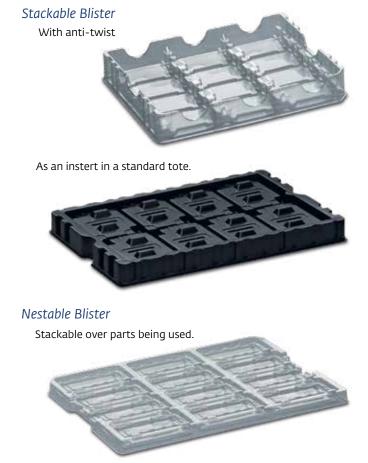


Interlayer trays with parts in lying position. Parts are held securely in place with detailed features on upper and lower trays.



Interlayer trays with an angled positioning of the parts to maximize the number of parts per tray.

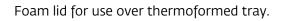




Foam used as alternative material for Component Holders

Expanded polypropylene foam can be used in lightweight and sensitive surface applications.





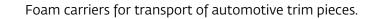




Foam divider inserts used in standard containers.









32

Combination of injection molded standard products with thermoformed trays

Thermoformed component trays can be specially designed to fit any Utz standard product.





A EUROTEC container with a thermoformed insert.





A thermoformed tray with tabs that fit in the milled hole of the container to enable a secure attachment of the tray to the RAKO container.

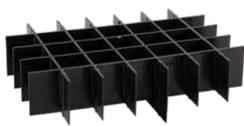
Pallet, alignment plate and tray combination

Unique footprint requirements of trays are often a challenge when combining for a standard shipping unit. Thermoformed alignment plates allow unique footprint trays to be securely stacked for shipping on a standard pallet.





Insert examples



Dividers used in standard products.



Solid bottom with low profile dividers for use in standard products.



4 cell insert for use with small parts in standard containers.



6 cell insert for use with small parts in standard containers.



Uncommon straight wall containers can be formed to accommodate lower volume non standard application.

Handles



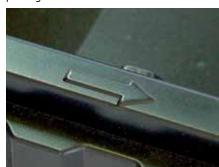
Handle slots (milled)



Shell-shaped handles



Recess to provide handle or robot picking access



Sign inserted in the tool

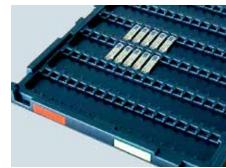
Protection against misorientation



Rounded-off corner or other design



Marking in color, co-extruded color stripes asymmetrical



Pad printing



Label placard

Identification



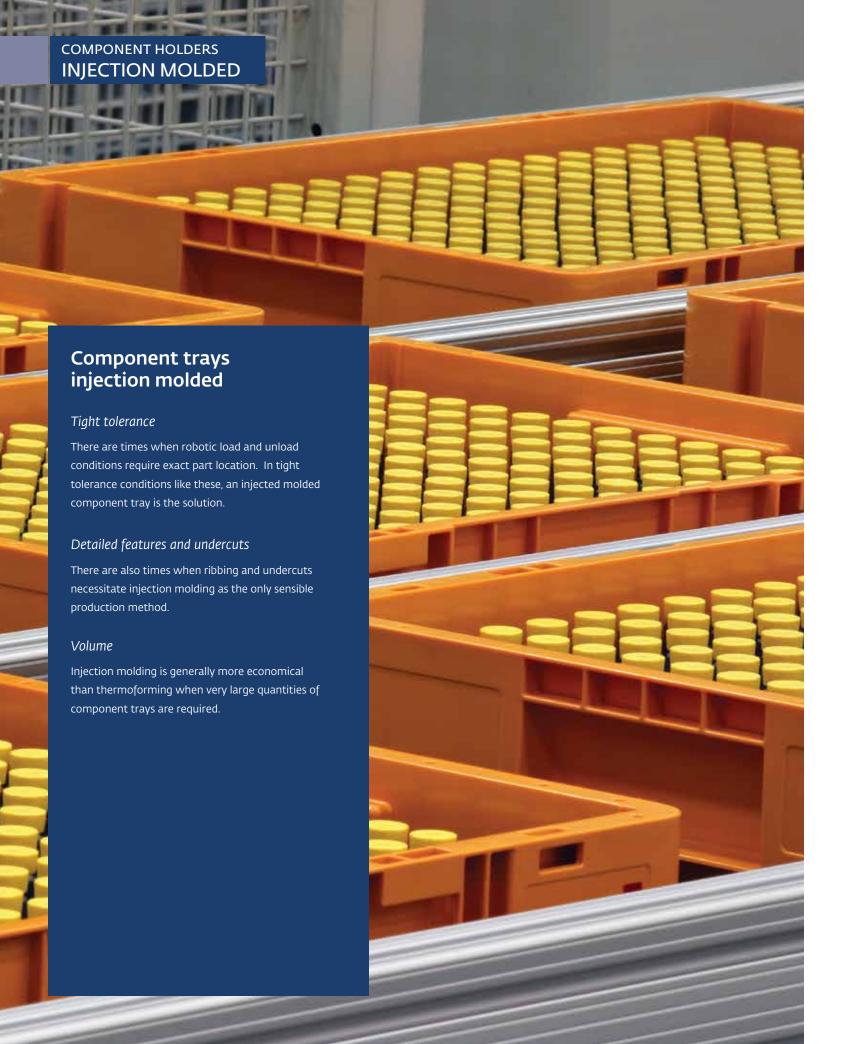
Mold in logo or text



Hot stamp



Label pocket



Examples



Transport unit for pharmaceutical industry



Automation transport trays for medical devices



Component holder for engine accessories



Transport kit for camshafts



Component holder for transport of multiple versions of pistons



Component holder for electronics housing

Injection Molded Frame Trays Utz Standard Sizes

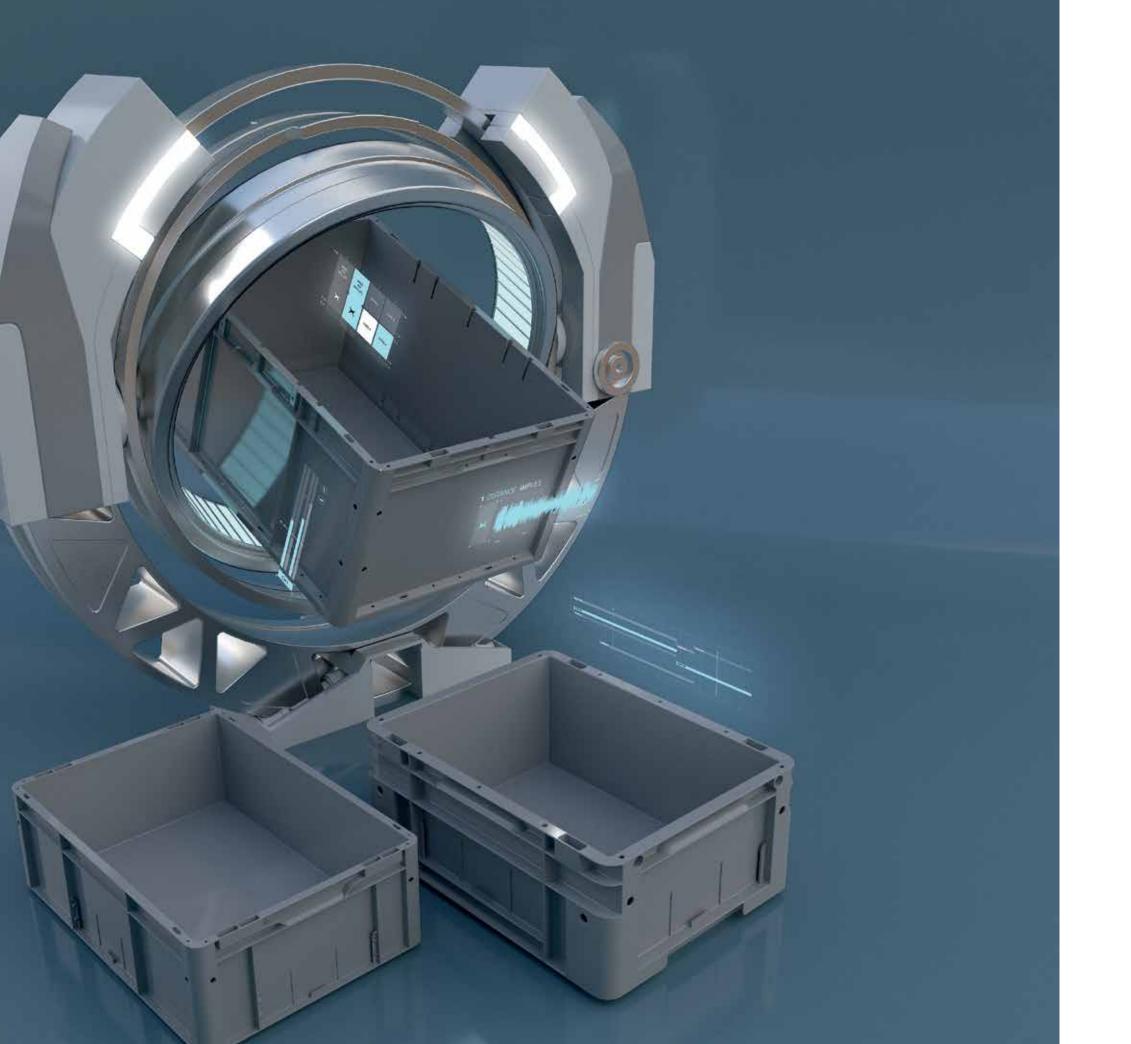
Footprint

24 x 15 in / 609 x 381 mm

24 x 16 in / 600 x 400 mm

Additional sizes available upon request





utz_{EUROTEC}

- 42 | Automation and Storage
- 42 | Shipping Information
- 43 | Container Base Option
- 44 | Wall Options
- 45 | Internal Bin Options
- 46 | EUROTEC 600 x 400 x 220 mm
- 46 | EUROTEC 600 x 400 x 280 mm
- 46 | EUROTEC 600 x 400 x 300 mm
- 46 | EUROTEC 600 x 400 x 320 mm
- 46 | EUROTEC 600 x 400 x 325 mm
- 47 | EUROTEC 650 x 450 x 325 mm
- 47 | EUROTEC 800 x 600 x 325 mm
- 47 | EUROTEC 800 x 600 x 425 mm

utz EUROTEC

Stacking containers for use in automated storage and retrieval

The EUROTEC is a high performance straight wall container designed with automated systems, conveyance, handling and storage in mind. The EUROTEC offers a variety of features to ensure reliable, repeatable and durable performance within your system. A patented integrated divider solution accommodates the need for multiple SKU's in one tote. A variety of footprints, heights and bottom constructions ensures an optimal solution depending on product storage needs.

Features

- Designed for automation and conveyor systems
- Reinforced base variants
- Enclosed double base
- Enclosed double corners
- Vertical grip hook
- Ergonomic handles
- Fields for hot stamp, labels, label pockets, barcodes and RFID tags
- Filling weight up to 110 lbs for ribbed base and 154 lbs for enclosed double base
- Optional drainage holes
- Patented interlocking dividers

Benefits

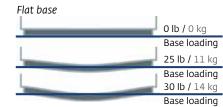
- Flawless performance on automated systems
- Wide range of interfaces for robotic handling or automatic conveyors
- Non-existing floor flexing
- Optimum base stability
- A variety of footprints, heights and bottom instruction ensure an optimal solution specific to your product needs
- Available in ESD material



EUROTEC Shipping data

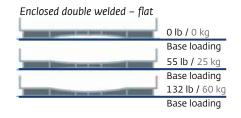
Part Number & Description	#/layer	#/pallet 1200 X 1000	#/pallet 1325 X 925	#/pallet 1200 X 800	#/truck 53' trailer
55-6040-220 600 x 400 x 220 mm	5	50			1500
55-6040-280 600 x 400 x 280 mm	5	45			1350
55-6040-300-100 600 x 400 x 300 mm	5	40			1200
55-6040G-320-100 600 x 400 x 320 mm Doubled welded and	5 hybrid	35			1050
55-6040-325 600 x 400 x 325 mm	5	50			1500
55-6040-325 600 x 400 x 325 mm Slotted wall	5	35			1050
55-6545-325 650 x 450 x 325 mm	4		28		812
55-8060-325 800 x 600 x 325 mm	2			14	546
55-8060-425 600 x 600 x 425 mm	2			16	624



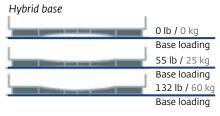


Bases













Typical base deflection — these do not affect the capacity of containers; it only shows the deflection of the bottom.

utz EUROTEC



Wall options

Smooth interior walls

Solid smooth interior walls and bottom allow for easy cleaning and avoid loss of small parts.



Dividers

Utz patented interlocking divider design is made of rigid ABS injection molded material. Short and long dividers are available in different heights.



Drainage holes

28 drainage hole standard. Other drainage configurations are available upon request. FM Global compliant drainage holes are also available upon request.



Internal bins

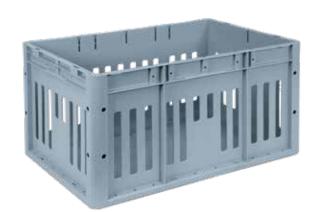
2, 4 and 8 bin inserts for easy picking and containment of small parts.



Open handles

Open handles allow for easy manual handling of heavy loads.





Slotted walls

Slotted walls accommodate situations where consistent air flow is critical.





EUROTEC avaialble in ESD material



EUROTEC avaialble in ESD material



utz EUROTEC



600 x 400 x 220 mm

23.6 x 15.7 x 8.7 in

Inner dimension: 554 x 354 x 217.50 mm / 21.8 x 14 x 8.6 in Capacity: 42.7 liters / 1.5 ft³

Part number	Base	Weight	Usable height
55-6040-220-0	flat	1.9 kg / 4.2 lb	205.5 mm / 8.1 in
55-6040-220-1	ribbed	2.5 kg / 5.5 lb	185.5 mm / 7.3 in
55-6040-220-2	double welded	2.6 kg / 5.7 lb	191.5 mm / 7.5 in
55-6040-220-3	hybrid	2.5 kg / 5.5lb	185.5 mm / 7.3 in



600 x 400 x 325 mm

23.6 x 15.7 x 12.8 in

Inner dimension: 554 x 354 x 322 mm / 21.8 x 14 x 12.7 in Capacity: 63.1 liters / 2.22 ft³

Base	Weight	Usable height
flat	2.5 kg / 5.5 lb	310 mm / 12.2 in
ribbed	3.0 kg / 6.7 lb	290.5 mm / 11.4 in
double welded	3.1 kg / 6.8 lb	296.5 mm / 11.7 in
hybrid	2.9 kg / 6.4 lb	290.5 mm / 11.4 in
	flat ribbed double welded	flat 2.5 kg / 5.5 lb ribbed 3.0 kg / 6.7 lb double welded 3.1 kg / 6.8 lb



600 x 400 x 280 mm

23.6 x 15.7 x 11 in

Inner dimension: 554 x 354 x 277.50 mm / 21.8 x 14 x 10.9 in Capacity: 54.4 liters / 1.92 ft³

Part number	Base	Weight	Usable height
55-6040-280-0	flat	2.2 kg / 4.8 lb	265.5 mm / 10.4 in
55-6040-280-1	ribbed	2.7 kg / 6.0 lb	245.5 mm / 9.7 in
55-6040-280-2	double welded	2.8 kg / 6.2 lb	251.5 mm / 9.9 in
55-6040-280-3	hybrid	2.7 kg / 6.0 lb	245.5 mm / 9.7 in



650 x 450 x 325 mm

25.6 x 17.7 x 12.8 in

Inner dimension: 604 x 404 x 322 mm / 24 x 16 x 12.7 in Capacity: 78.6 liters / 2.8 ft³

Part number	Base	Weight	Usable height
55-6545-325-0	flat	2.8 kg / 6.2 lb	310 mm / 12.2 in
55-6545-325-1	ribbed	3.5 kg / 7.7 lb	290.5 mm / 11.4 in
55-6545-325-2	double welded	3.6 kg / 7.9 lb	296.5 mm / 11.7 in
55-6545-325-3	hybrid	3.4 kg / 7.4 lb	290.5 mm / 11.4 in



600 x 400 x 300 mm

23.6 x 15.7 x 11.8 in

Inner dimension: 565 x 365 x 282 mm / 22.2 x 14.3 x 11.1 in Capacity: 58.1 liters / 2.1 ft³

Part number	Base	Weight	Usable height
55-6040-300-100	double welded	2.9 kg / 6.4 lb	271 mm / 10.7 in



800 x 600 x 325 mm

31.5 x 23.6 x 12.8 in

Inner dimension: 748 x 548 x 322 mm / 29.45 x 21.58 x 12.68 in Capacity: 132.0 liters / $4.7 \, \mathrm{ft^3}$

Part number	Base	Weight	Usable height
55-8060-325-0	flat	4.0 kg / 8.8 lb	308 mm / 12.1 in
55-8060-325-2	double welded	5.5 kg / 412.1 lb	291 mm / 11.5 in



600 x 400 x 320 mm

23.6 x 15.7 x 12.6 in

Inner dimension: 565 x 365 x 296 mm / 22.2 x 14.3 x 11.6 in Capacity: 61.0 liters / 2.1 ft³

Part number	Base	Weight	Usable height
55-6040G-320-100	double welded	2.95 kg / 6.5 lb	290 mm / 11.4 in
55-6040G-320-3	hybrid	2.85 kg / 6.3 lb	284 mm / 11.2 in



800 x 600 x 425 mm

31.5 x 23.6 x 16.6 in

Inner dimension: 748 x 548 x 277.5 mm / 29.45 x 21.58 x 16.61 in Capacity: 173 liters / 6.1 ft³

Part number	Base	Weight*	Usable height
55-8060-425-0	flat	5.2 kg / 11.5 lb	408 mm / 16.1 in
55-8060-425-2	double welded	6.6 kg / 14.5 lb	391 mm / 15.4 in

*The wall thickness for estimated weights are 2.75" walls

EUROTEC avaialble in ESD material



EUROTEC avaialble in ESD material





Small Load Containers-SLC

50 | Small Load Containers-SLC

50 | Shipping information

51 | Base and Handle options

52 | SLC 15 x 12 x 5 in

52 | SLC 15 x 12 x 7.5 in

52 | SLC 15 x 12 x 9.5 in

53 | SCL 24 x 15 x 5 in

53 | SLC 24 x 15 x 7.5 in

54 | SLC 24 x 15 x 9.5 in

54 | SLC 24 x 15 x 11 in

54 | SLC 24 x 15 x 14.5 in

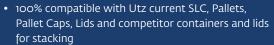
55 | SLC 24 x 22 x 8.75 in

55 | SLC 24 x 22 x 11.5 in

55 | SLC 24 x 22 x 14 in

56 | SLC Accessories





- Ergonomic, heavy-duty handle on short side
- High Impact PP

Label Holders

- Textured label area--eliminates placards
- Label holder redesign
- Snap in
- More visible
- Easier to use

Automation Friendly

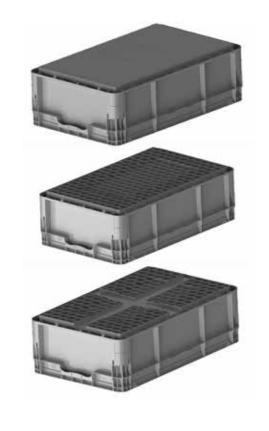
- Conveyable features for improved automation
- Rounded corner
- Continuous skirt
- Chamfered base
- Improved durability of corners

SLC shipping data

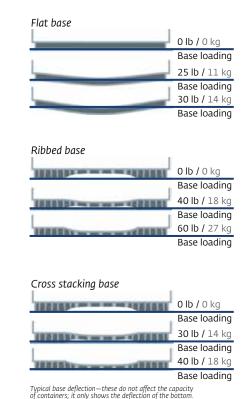
Seat belt options available

Part Number	Description	#/layer	#/pallet 48"x 45"	#/truck 53' trailer
50-1512-50	15 x 12 x 5 in	12	240	6240
50-1512-75	15 x 12 x 7.5 in	12	156	4056
50-1512-95	15 x 12 x 9.5 in	12	120	3120
50-2415-50	24 x 15 x 5 in	6	120	3120
50-2415-75	24 x 15 x 7.5 in	6	78	2028
50-2415-95	24 x 15 x 9.5 in	6	60	1560
50-2415-11	24 x 15 x 11 in	6	48	1248
50-2415-145	24 x 15 x 14.5 in	6	36	936
50-2422-90	24 x 22 x 8.75 in	4	44	1144
50-2422-11	24 x 22 x 11.5 in	4	32	832
50-2422-145	24 x 22 x 14 in	4	24	624

Pallet found on page 87. / Lid found on page 91.



Bases



Shell handles



Large ergonomically designed shell handles are comfortable for manual transferring of heavy loads and allow ample clearance for bulky work gloves. Handles have drainage holes to drain collection of water during cleaning or temporary storage outside.



15 x 12 x 5 in

Exterior dimension: 15 x 12 x 5 in / 381 x 305 x 127 mm Inner dimension: 13.1 x 9.6 x 4.4 in / 333 x 243 x 112 mm

Walls: solid

50-1512-50-3

Handles: 2 shell handles Capacity: 0.4 ft³ / 10 liters

Part number	Base	Weight	Usable h w/o lid	neight w/ lid
50-1512-50-0	flat	1.5 lb / 0.7 kg	4.4 in 112 mm	4.9 in 125 mm
50-1512-50-2	cross stacking	1.8 lb / 0.8 kg	3. 9 in 99 mm	4.4 in 112 mm

1.8 lb / 0.8 kg 3.9 in

112 mm



24 x 15 x 5 in

Exterior dimension: 24 x 15 x 5 in / 609 x 381 x 127 mm Inner dimension: 21.6 x 13.1 x 4.4 in / 548 x 333 x 112 mm

Walls: solid

Handles: 2 shell handles

Capacity: 0.8 ft³ / 23 liters

, ,			Usable h	eiaht
Part number	Base	Weight	w/o lid	
50-2415-50-0	flat	2.5 lb / 1.1 kg	4.4 in 112 mm	4.9 in 125 mm
50-2415-50-2	cross stacking	2.9 lb / 1.3 kg	3.9 in 99 mm	4.4 in 112 mm
50-2415-50-3	ribbed	2.9 lb / 1.3 kg	3. 9 in 99 mm	4.4 in 112 mm



15 x 12 x 7.5 in

ribbed

Exterior dimension: 15 x 12 x 7.5 in / 381 x 305 x 190 mm Inner dimension: 13.1 x 9.6 x 6.9 in / 333 x 243 x 175 mm

Walls: solid

Handles: 2 shell handles Capacity: 0.6 ft³ / 16 liters

Cupacity. 0.0 ft /	10 111113		Usable height	
Part number	Base	Weight	w/o lid	
50-1512-75-0	flat	2.0 lb / 0.9 kg	6.9 in 175 mm	7.4 in 188 mm
50-1512-75-2	cross stacking	2.3 lb / 1.0 kg	6.4 in 162 mm	6.9 in 175 mm
50-1512-75-3	ribbed	2.3 lb / 1.0 kg	6.4 in 162 mm	6.9 in 175 mm



24 x 15 x 7.5 in

Exterior dimension: 24 x 15 x 7.5 in / 609 x 381 x 191 mm Inner dimension: 21.6 x 13.1 x 6.9 in / 548 x 333 x 176 mm

Walls: solid

Handles: 2 shell handles Capacity: 1.2 ft³ / 35 liters

Part number	Base	Weight	Usable h w/o lid		
50-2415-75-0	flat	3.2 lb / 1.4 kg	6.9 in 175 mm	7.4 in 188 mm	
50-2415-75-2	cross stacking	3.5 lb / 1.6 kg	6.4 in 162 mm	6.9 in 175 mm	
50-2415-75-3	ribbed	3.5 lb / 1.6 kg	6.4 in	6.9 in	



15 x 12 x 9.5 in

Exterior dimension: 15 x 12 x 9.5 in / 381 x 305 x 241 mm Inner dimension: 13.1 x 9.6 x 8.9 in / 333 x 243 x 226 mm

Walls: solid

Handles: 2 shell handles Capacity: 0.7 ft³ / 20 liters

Part number	Base	Weight	Usable h w/o lid	neight w/ lid
50-1512-95-0	flat	2.4 lb / 1.1 kg	8.9 in 225 mm	9.4 in 238 mm
50-1512-95-2	cross stacking	2.6 lb / 1.2 kg	8.4 in 213 mm	8.9 in 225 mm
50-1512-95-3	ribbed	2.6 lb / 1.2 kg	8.4 in 213 mm	8.9 in 225 mm



24 x 15 x 9.5 in

Exterior dimension: 24 x 15 x 9.5 in / 609 x 381 x 241 mm Inner dimension: 21.6 x 13.1 x 8.9 in / 548 x 333 x 226 mm

Walls: solid

Handles: 2 shell handles Capacity: 1.5 ft³ / 42.4 liters

Part number	Base	Weight	Usable h w/o lid	
50-2415-95-0	flat	3.4 lb / 1.5 kg	8.8 in 225 mm	9.4 in 238 mm
50-2415-95-2	cross stacking	3.9 lb / 1.8 kg	8.4 in 212 mm	8.8 in 225 mm
50-2415-95-3	ribbed	3.9 lb / 1.8 kg	8.4 in	8.8 in

SLC ESD container information found on page 72-73.



SLC ESD container information found on page 72-73.



SLC



24 x 15 x 11 in

Exterior dimension: 24 x 15 x 11 in / 609 x 381 x 279 mm Inner dimension: 21.6 x 13.1 x 10.4 in / 548 x 333 x 234 mm

Walls: solid

Handles: 2 shell handles Capacity: 1.8 ft³ / 51 liters

Part number	Base	Weight	Usable h w/o lid	
50-2415-110-0	flat	4.0 lb / 1.8 kg	10.4 in 264 mm	10.9 in 277 mm
50-2415-110-2	cross stacking	4.4 lb / 2.0 kg	9.9 in 251 mm	10.4 in 264 mm
50-2415-110-3	ribbed	4.4 lb / 2.0 kg	9.9 in 251 mm	10.4 in 264 mm



24 x 22 x 8.75 in

Exterior dimension: 24 x 22 x 8.75 in / 609 x 559 x 222 mm Inner dimension: 21.6 x 20.5 x 8.1 in / 548 x 523 x 206 mm

Walls: solid

Handles: 2 shell handles

Capacity: 2.2 ft³ / 62 liters

			Usable h	eiaht
Part number	Base	Weight	w/o lid	
50-2422-90-0	flat	5.8 lb / 2.6 kg	8.1 in 206 mm	8.6 in 218 mm
50-2422-90-2	cross stacking	6.2 lb / 2.8 kg	7.6 in 193 mm	8.1 in 206 mm
50-2422-90-3	ribbed	6.2 lb / 2.8 kg	7.6 in 193 mm	8.1 in 206 mm



24 x 15 x 14.5 in

Exterior dimension: 24 x 15 x 14.5 in / 609 x 381 x 368 mm Inner dimension: 21.6 x 13.1 x 13.9 in / 548 x 332 x 353 mm Walls: solid

Handles: 2 shell handles Capacity: 2.3 ft³ / 66 liters

Capacity. 2.5 ft 7 00 litters			Usable height		
Part number	Base	Weight	w/o lid	w/ lid	
50-2415-145-0	flat	4.9 lb / 2.2 kg	13.9 in 352 mm	14.4 in 365 mm	
50-2415-145-2	cross stacking	5.3 lb / 2.4 kg	13.4 in 340 mm	13.9 in 352 mm	
50-2415-145-3	ribbed	5.3 lb / 2.4 kg	13.4 in 340 mm	13.9 in 352 mm	



24 x 22 x 11 in

Exterior dimension: 24 x 22.5 x 11 in / 609 x 572 x 279 mm Inner dimension: 21.6 x 20.5 x 10.4 in / 548 x 523 x 264 mm

Walls: solid

Handles: 2 shell handles Capacity: 2.8 ft³ / 79 liters

Usable height w/o lid w/ lid Part number Weight Base 50-2422-110-0 6.7 lb / 3.0 kg 10.4 in 10.9 in 264 mm 277 mm 50-2422-110-2 cross stacking 7.1 lb / 3.2 kg 251 mm 264 mm 50-2422-110-3 ribbed 7.1 lb / 3.2 kg 9.9 in



SLC ESD container information found on page 72-73.



Inner dimension: 21.6 x 20.5 x 13.9 in / 548 x 523 x 353 mm

Walls: solid

Handles: 2 shell handles Capacity: 3.8 ft³ / 108 liters

Part number	Base	Weight	Usable h w/o lid	
50-2422-145-0	flat	8.2 lb / 3.7 kg	13.9 in 353 mm	14.4 in 365 mm
50-2422-145-2	cross stacking	8.6 lb / 3.9 kg	13.4 in 340 mm	13.9 in 353 mm
50-2422-145-3	ribbed	8.6 lb / 3.9 kg	13.4 in 340 mm	13.9 in 353 mm

SLC ESD container information found on page 72-73.

54







Snap lock



Hinge reinforcement



Label holder



Galvanized clip



Label Placard



Hot stamping



4 or 6 cell inserts



Thermoformed dividers



Foam Dividers

Available colors

order requirement.

A variety of colors are available with a minimum

Black



Dark gray



Silver gray





Lime green



Orange

SLC accessories

All containers can be ordered with a variety of options:

- Snap-locks are designed for easy opening and closing. Security seals are also available to prevent tampering.
- Hinge reinforcements permanently secure the lid to the container.
- Label holders, galvanized clips and hot stamping are automation features for locating, lifting, identification and orientation.
- Dividers are designed to be flexible for your specific product and allow for safe and secure transport.

Part number	Accessories	
89-4-865	Snap lock	
89-4-867	Hinge reinforcement	
50-1-0	Label Holder	
80-417-3	Galvanized Clip	16 mm
80-10011	Label Placard	
Hot stamping	Font: HELVETICA 14 mm, UPPER and lower 30 mm, UPPER and lower	
20-10017	4 cell thermoformed inser	rt
20-10018	6 cell thermoformed inser	rt
Dividers	Custom made	
Foam Divider	Custom made	



Lids

Optional lids protect contents from dust and other foreign material. Lids are available in loose, hook-in and hinged options.

Part number	Article	Outer dimension
50-1512-0-0	Loose lid	15 x 12 in 381 x 305 mm
50-2415-0-0	Loose lid	24 x 15 in 609 x 381 mm
50-1512-0-2	Hook-in lid	15 x 12 in 381 x 305 mm
50-2415-0-2	Hook-in lid	24 x 15 in 609 x 381 mm
50-1512-0-1	Hinged lid	15 x 12 in 381 x 305 mm
50-2415-0-1	Hinged lid	24 x 15 in 609 x 381 mm
20-10008	Thermoformed Loose lid	24 x 22 in 609 x 559 mm



utz

60 | Versatile Performer

60 | Shipping information

61 | Bases, Handles and Wall Options

62 | RAKO 200 x 150 x 120 mm

62 | RAKO 300 x 200 x 120 mm

62 | RAKO 300 x 200 x 220 mm

62 | RAKO 400 x 300 x 120 mm

63 | RAKO 400 x 300 x 170 mm

63 | RAKO 400 x 300 x 220 mm

63 | RAKO 600 x 400 x 100 mm

63 | RAKO 600 x 400 x 120 mm

64 | RAKO 600 x 400 x 170 mm

64 | RAKO 600 x 400 x 220 mm

64 | RAKO 600 x 400 x 325 mm

65 | Modified Heights

65 | Special Cut Options

66 | RAKO Accessories

Base loading



RAKO shipping data

Part Number	Description	#/layer	#/pallet 1200 x 800	#/truck 53' trailer
3-237	200 x 150 x 120 mm	32	640	24960
3-206	300 x 200 x 120 mm	16	320	12480
3-210	300 x 200 x 220 mm	16	160	6240
D				
Part Number	Description	#/layer	#/pallet 1200 X 1000	#/truck 53' trailer
	Description 400 x 300 x 120 mm	#/layer		
Number		- /	1200 X 1000	53' trailer
Number 3-203	400 x 300 x 120 mm	10	1200 X 1000 200	53' trailer 6000
Number 3-203 3-207	400 x 300 x 120 mm 400 x 300 x 170 mm	10	200 150	53 ['] trailer 6000 4500

2250

1500

Pallet found on page 87-90. / Lid found on page 91.

600 x 400 x 170 mm

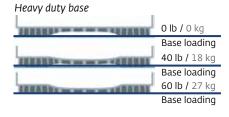
600 x 400 x 220 mm

600 x 400 x 325 mm

3-208



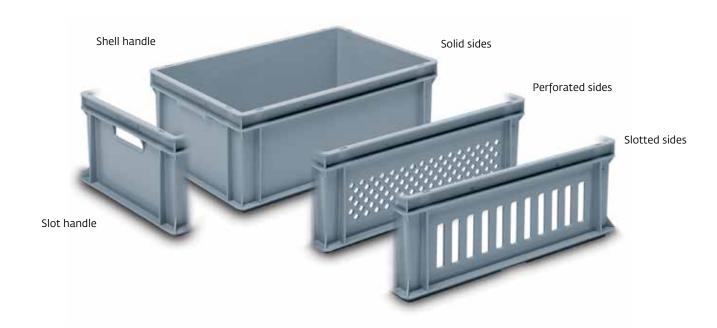
Bases Flat base O Ib / 0 kg Base loading 25 Ib / 11 kg Base loading 30 Ib / 14 kg



Enclosed double base	
	0 lb / 0 kg
T.	Base loading
	55 lb / 25 kg
	Base loading
Part Part Part	132 lb / 60 k
	D 1 1'

Typical base deflection — these do not affect the capacity of containers; it only shows the deflection of the bottom.

Handles & Wall Options



60

design flexibility. It allows for a wide number of design variations ranging from base options to different types

of handles and sides. All RAKOs are available in ESD

material. 🔼





200 x 150 x 120 mm

8 x 6 x 4.7 in

Inner dimension: 162 x 112 x 97 mm / 6.4 x 4.4 x 3.8 in

Base: flat

Weight: 0.2 kg / 0.4 lb Capacity: 2 liters / 0.07 ft³

Part number	Walls	Handles	Usable h w/o lid	neight w/ lid
3-237-0 *	solid	profile	97 mm 3.8 in	112 mm 4.4 in

^{*} Produced in Germany



300 x 200 x 120 mm

12 x 8 x 4.7 in

Inner dimension: 258 x 160 x 97 mm / 10.2 x 6.4 x 3.8 in

Base: flat

Weight: 0.5 kg / 1.1 lb

Capacity: 5 liters / 0.17 ft³

Part number	Walls	Handles	w/o lid	
3-206-0 *	solid	profile	97 mm 3.8 in	112 mm 4.4 in

^{*} Produced in Germany



300 x 200 x 220 mm

12 x 8 x 8.7 in

Inner dimension: 258 x 160 x 203 mm / 10.2 x 6.3 x 8.0 in

Base: flat

Weight: 0.7 kg / 1.5 lb Capacity: 9 liters / 0.32 ft³

Part number	r Walls	Handles	Usable w/o lid	height w/ lid	
3-210-0	solid	profile	203 mm	218 mm	

^{*} Produced in Germany



400 x 300 x 120 mm

16 x 12 x 4.7 in

Inner dimension: 358 x 258 x 100 mm / 14.1 x 10.2 x 3.9 in

Weight: 0.9 kg / 2.0 lb Capacity: 10 liters / 0.35 ft³

Part number	Walls	Handles	Usable h w/o lid	
3-203-0	solid	2 shell handles	100 mm 3.9 in	114 mm 4.5 in
3-203-1	long sides perforated, short sides solid	2 shell handles	100 mm 3.9 in	114 mm 4.5 in
3-203-2	long sides slotted, short sides solid	2 shell handles	100 mm 3.9 in	114 mm 4.5 in









RAKO ESD container information found on page 74-75.



400 x 300 x 170 mm

16 x 12 x 6.7 in

Inner dimension: 358 x 258 x 165 mm / 14.1 x 10.2 x 6.5 in

Base: flat

Weight: 0.9 kg / 2.0 lb Capacity: 15 liters / 0.53 ft³

Part number	Walls	Handles	Usable h w/o lid	neight w/ lid
3-207-0	solid	2 shell handles	151 mm 6.0 in	165 mm 6.5 in

400 x 300 x 220 mm

16 x 12 x 8.7 in

Inner dimension: 358 x 258 x 203 mm / 14.1 x 10.2 x 8.0 in

Base: flat

Weight: 1.3 kg / 2.9 lb Capacity: 20 liters / 0.71 ft³

cupulotty: 20			Usable l	neiaht
Part number	· Walls	Handles	w/o lid	w/ lid
3-204-0	solid	2 shell handles	203 mm 8.0 in	217 mm 8.5 in
3-304-0	solid	2 handle slots	203 mm 8.0 in	217 mm 8.5 in
3-204-1	perforated	2 shell handles	203 mm 8.0 in	217 mm 8.5 in
3-304-1	perforated	2 handle slots	203 mm 8.0 in	217 mm 8.5 in
3-204-2	slotted	2 shell handles	203 mm 8.0 in	217 mm 8.5 in
3-304-2	slotted	2 handle slots	203 mm 8.0 in	217 mm 8.5 in

600 x 400 x 100 mm

24 x 16 x 3.9 in

Inner dimension: 558 x 358 x 83 mm / 22.0 x 14.1 x 3.2 in

Base: flat

Weight: 1.3 kg / 2.9 lb Capacity: 19 liters / 0.67 ft³

Part number	Walls	Handles	Usable h w/o lid	
3-228-0	solid	2 shell handles	83 mm 3.2 in	97 mm 3.8 in
3-228-1	long sides perforated, short sides solid	2 shell handles	83 mm 3.2 in	97 mm 3.8 in
3-228-2	long sides slotted, short sides solid	2 shell handles	83 mm 3.2 in	97 mm 3.8 in

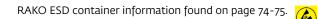
600 x 400 x 120 mm

24 x 16 x 4.7 in

Inner dimension: 558 x 358 x 100 mm / 22.0 x 14.1 x 3.9 in

Weight: 1.7 kg / 3.75 lb Capacity: 20 liters / 0.71 ft³

Part number	Walls	Handles	Usable h w/o lid	neight w/ lid
3-200-0	solid	2 shell handles	100 mm 3.9 in	114 mm 4.5 in
3-200-1	long sides perforated, short sides solid	2 shell handles	100 mm 3.9 in	114 mm 4.5 in
3-200-2	long sides slotted, short sides solid	2 shell handles	100 mm 3.9 in	114 mm 4.5 in







600 x 400 x 170 mm

24 x 16 x 6.5 in

Inner dimension: 558 x 358 x 165 mm / 22 x 14.1 x 6.5 in

Weight: 1.5 kg / 3.31 lb Capacity: 30 liters / 1.6 ft³

Part numbe	r Walls	Handles	Usable w/o lid	
3-208- 0	solid	2 shell handles 5.9 in	149 mm 6.4 in	163 mm
3-208 -1	perforated	2 shell handles	149 mm 5.9 in	163 mm 6.4 in
3-208 -2	slotted	2 shell handles	149 mm 5.9 in	163 mm 6.4 in



Part number	· Walls	Handles	w/o lid	w/ lid
3-208- 0	solid	2 shell handles 5.9 in	149 mm 6.4 in	163 mm
3-208 -1	perforated	2 shell handles	149 mm 5.9 in	163 mm 6.4 in
3-208 -2	slotted	2 shell handles	149 mm 5.9 in	163 mm 6.4 in



24 x 16 x 8.7 in

Inner dimension: 558 x 358 x 203 mm / 22.0 x 14.1 x 8.0 in

Base: flat

Weight: 2.3 kg / 5.1 lb Canacity: 40 liters / 1 42 ft³

Capacity. 40	11LEIS / 1.42 L		Usable	haiaht
Part number	Walls	Handles	w/o lid	w/ lid
3-201-0	solid	2 shell handles	203 mm 8.0 in	217 mm 8.5 in
3-301-0	solid	2 handle slots	203 mm 8.0 in	217 mm 8.5 in
3-201-1	perforated	2 shell handles	203 mm 8.0 in	217 mm 8.5 in
3-301-1	perforated	2 handle slots	203 mm 8.0 in	217 mm 8.5 in
3-201-2	slotted	2 shell handles	203 mm 8.0 in	217 mm 8.5 in
3-301-2	slotted	2 handle slots	203 mm 8.0 in	217 mm 8.5 in



24 x 16 x 12.8 in

Inner dimension: 558 x 358 x 305 mm / 22.0 x 14.1 x 12.0 in

Weight: 3.0 kg / 6.6 lb Capacity: 60 liters / 2.12 ft³

cupacity. 00	11013 / 2.12		Usable l	heiaht
Part number	· Walls	Handles	w/o lid	w/ lid
3-202-0	solid	2 shell handles	305 mm 12.0 in	319 mm 12.6 in
3-302-0	solid	2 handle slots	305 mm 12.0 in	319 mm 12.6 in
3-202-1	perforated	2 shell handles	305 mm 12.0 in	319 mm 12.6 in
3-302-1	perforated	2 handle slots	305 mm 12.0 in	319 mm 12.6 in
3-202-2	slotted	2 shell handles	305 mm 12.0 in	319 mm 12.6 in
3-302-2	slotted	2 handle slots	305 mm 12.0 in	319 mm 12.6 in

Modified heights

The RAKO frame design allows the container to be cut to a shorter height dimension via a secondary operation.

Cut down size
300 x 200 x 94.5 mm / 12 x 8 x 3.7 in
300 x 200 x 190 mm / 12 x 8 x 7.5 in
400 x 300 x 94.5 mm / 16 x 12 x 3.7 in
400 x 300 x 134 mm / 16 x 12 x 5.3 in
400 x 300 x 190 mm / 16 x 12 x 7.5 in
600 x 400 x 75 mm / 24 x 16 x 2.9 in
600 x 400 x 94.5 mm / 24 x 16 x 3.7 in
600 x 400 x 134 mm / 24 x 16 x 5.3 in
600 x 400 x 190 mm / 24 x 16 x 7.5 in
600 x 400 x 288 mm / 24 x 16 x 11.3 in



Special cut out options

Standard containers can be modified for special uses. Cut outs can be precisely made with our CNC milling machine.





RAKO ESD container information found on page 74-75.



RAKO ESD container information found on page 74-75.



utz RAKO





Hinge reinforcement



Galvanized clip



Dividers



Hot stamping

Container accessories

All containers can be ordered with a variety of options:

- Snap-locks are designed for easy opening and closing. Security seals are also available to prevent tampering.
- Hinge reinforcement permanently secures lid to container.
- Galvanized clips and hot stamping are automation features for locating, lifting, identification and orientation.
- Dividers allow for products to be safe and secure while in transport.

Part number	Accessories
89-4-862	Snap lock
89-3-832	Hinge reinforcement
80-417-1	Galvanized Clip 19 mm
Dividers	Custom made
Handles	Upon request
Hot stamping	Font: HELVETICA 14 mm, UPPER and lower case 30 mm, UPPER and lower case



Lids

Optional lids protect contents from dust and other foreign material. Lids are available in loose, hook-in, hinged and thermoform options.

Part number	Article	Outer dimension
3-944-0 *	Loose lid	200 x 150 mm 8 x 6 in
3-215-0 *	Loose lid	300 x 200 mm 12 x 8 in
3-214-0-0	Loose lid	400 x 300 mm 16 x 12 in
3-213-0-0	Loose lid	600 x 400 mm 24 x 16 in
3-944-2	Hook-in lid	200 x 150 mm 8 x 6 in
3-215-0-2	Hook-in lid	300 x 200 mm 12 x 8 in
3-214-0-2	Hook-in lid	400 x 300 mm 16 x 12 in
3-213-0-2	Hook-in lid	600 x 400 mm 24 x 16 in
3-944-1	Hinged lid	200 x 150 mm 8 x 6 in
3-215-0-1	Hinged lid	300 x 200 mm 12 x 8 in
3-214-0-1	Hinged lid	400 x 300 mm 16 x 12 in
3-213-0-1	Hinged lid	600 x 400 mm 24 x 16 in
20-10010	Thermoform Loose lid	600 x 400 mm 24 x 16 in

Produced in Germany

Available colors

A variety of colors are available with a minimum order requirement.



Dark gray



Silver gray





Electrostatic Discharge Products

- 70 | Conductive Products
- 71 | Component Holders
- 72 | SLC
- 74 | RAKO
- 76 | ESD Lids
- 77 | Printed Circuit Board Holder

Custom ESD Thermoformed Trays



Thermoformed component trays

ESD thermoformed trays can be produced as interlayer, stacking or stack and nest.



Thermoformed component trays from a frame tool

Custom thermoformed trays can be produced from Utz frame tools. The frame tool designs are compatible for conveying and automated systems.



Injection molded component trays

Custom injection molded trays are required when either tolerance, design features, or volume dictates.



Specialty trays

Utz has a variety of products and process specific solutions to suit our customers needs.







15 x 12 x 5 in

Exterior dimension: 15 x 12 x 5 in / 381 x 305 x 127 mm Inner dimension: 13.1 x 9.6 x 4.4 in / 333 x 243 x 112 mm

Walls: solid Handles: 2 shell handles Capacity: 0.4 ft³ / 10 liters

Usable height Part number Weight Base w/o lid w/ lid 50-1512-50-0.EL flat 1.7 lb / 0.8 kg 4.4 in 4.9 in 112 mm 50-1512-50-2.EL cross stacking 1.9 lb / 0.9 kg 112 mm 50-1512-50-3.EL ribbed 1.9 lb / 0.9 kg 3.9 in 4.4 in

15 x 12 x 7.5 in

Exterior dimension: $315 \times 12 \times 7.5$ in / $381 \times 305 \times 190$ mm Inner dimension: $13.1 \times 9.6 \times 6.9$ in / $333 \times 243 \times 175$ mm

Handles: 2 shell handles Capacity: 0.5 ft³ / 15 liters

Walls: solid

Part number	Base	Weight	Usable h w/o lid	eight w/ lid
50-1512-75-0.EL	flat	2.2 lb / 1.0 kg	6.9 in 175 mm	7.4 in 188 mm
50-1512-75-2.EL	cross stacking	2.5 lb / 1.1 kg	6.4 in 162 mm	6.9 in 175 mm
50-1512-75-3.EL	ribbed	2.5 lb / 1.1 kg	6.4 in 162 mm	6.9 in 175 mm

15 x 12 x 9.5 in

Exterior dimension: $15 \times 12 \times 9.5$ in / $381 \times 305 \times 244$ mm Inner dimension: $13.1 \times 9.6 \times 8.9$ in / $333 \times 243 \times 238$ mm

Walls: solid Handles: 2 shell handles

Capacity: 0.7 ft³ / 19 liters

Part number	Base	Weight	Usable he w/o lid	eight w/ lid
50-1512-95-0.EL	flat	2.6 lb / 1.2 kg	8.9 in 225 mm	9.4 in 238 mm
50-1512-95- 2.EL	cross stacking	2.9 lb / 1.3 kg	8.4 in 213 mm	8.9 in 225 mm
50-1512-95 -3.EL	ribbed	2.9 lb / 1.3 kg	8.4 in 213 mm	8.9 in 225 mm

24 x 15 x 5 in

Exterior dimension: $24 \times 15 \times 5$ in / $609 \times 381 \times 127$ mm Inner dimension: $21.6 \times 13.1 \times 4.4$ in / $548 \times 333 \times 112$ mm

Walls: solid

112 mm

99 mm

Handles: 2 shell handles Capacity: 0.8 ft³ / 23 liters

cupacity. 0.0 ft / 2	Usable l	height			
Part number	Base	Weight	w/o lid		
50-2415-50-0.EL	flat	2.7 lb / 1.2 kg	4.4 in 112 mm	4.9 in 125 mm	
50-2415-50-2.EL	cross stacking	3.2 lb / 1.4 kg	3. 9 in 99 mm	4.4 in 112 mm	
50-2415-50-3.EL	ribbed	3.2 lb / 1.4 kg	3.9 in 99 mm	4.4 in 112 mm	

24 x 15 x 7.5 in

Exterior dimension: 24 x 15 x 7.5 in / 609 x 381 x 191 mm Inner dimension: 21.6 x 13.1 x 6.9 in / 548 x 333 x 176 mm

Walls: solid

Handles: 2 shell handles Capacity: 1.2 ft³ / 34 liters

Part number	Base	Weight	Usable w/o lid	height w/ lid
50-2415-75-0.EL	flat	3.4 lb / 1.6 kg	6.9 in 175 mm	7.4 in 188 mm
50-2415-75-2.EL	cross stacking	3.9 lb / 1.7 kg	6.4 in 162 mm	6.9 in 175 mm
50-2415-75-3.EL	ribbed	3.9 lb / 1.7 kg	6.4 in 162 mm	6.9 in 175 mm

24 x 15 x 9.5 in

Exterior dimension: 24 x 15 x 9.5 in / 609 x 381 x 241 mm Inner dimension: 21.6 x 13.1 x 8.9 in / 548 x 333 x 226 mm

Walls: solid

Handles: 2 shell handles Capacity: 1.5 ft³ / 43 liters

Part number	Base	Weight	Usable h w/o lid		
50-2415-95-0.EL	flat	3.7 lb / 1.7 kg	8.8 in 225 mm	9.4 in 238 mm	
50-2415-95-2.EL	cross stacking	4.3 lb / 2.0 kg	8.3 in 212 mm	8.9 in 225 mm	
50-2415-95-3.EL	ribbed	4.3 lb / 2.0 kg	8.3 in	8.9 in	

24 x 15 x 11 in

Exterior dimension: $24 \times 15 \times 11$ in / $609 \times 381 \times 279$ mm Inner dimension: $21.6 \times 13.1 \times 10.4$ in / $548 \times 333 \times 234$ mm

Walls: solid Handles: 2 sk

Handles: 2 shell handles Capacity: 1.8 ft³ / 51 liters

Part number	Base	Weight	Usable w/o lid	height w/ lid
50-2415-110-0.EL	flat	4.4 lb / 2.0 kg	10.4 in 264 mm	10.9 in 277 mm
50-2415-110-2.EL	cross stacking	4.8 lb / 2.2 kg	9.9 in 251 mm	10.4 in 264 mm
50-2415-110-3.EL	ribbed	4.8 lb / 2.2 kg	9.9 in 251 mm	10.4 in 264 mm

24 x 15 x 14.5 in

Exterior dimension: $24 \times 15 \times 14.5$ in / $609 \times 381 \times 368$ mm Inner dimension: $21.6 \times 13.1 \times 13.9$ in / $548 \times 332 \times 353$ mm

Walls: solid

Handles: 2 shell handles Capacity: 2.3 ft³ / 66 liters

Part number	Base	Weight	w/o lid	neignt w/ lid	
50-2415-145-0.EL	flat	5.4 lb / 2.5 kg	13.9 in 352 mm	14.4 in 365 mm	
50-2415-145-2.EL	cross stacking	5.8 lb / 2.6 kg	13.4 in 340 mm	13.9 in 352 mm	
50-2415-145-3.EL	ribbed	5.8 lb / 2.6 kg	13.4 in 340 mm	13.9 in 352 mm	

24 x 22 x 8.75 in

Exterior dimension: 24 x 22 x 8.75 in / 609 x 559 x 222 mm Inner dimension: 21.6 x 20.5 x 8.1 in / 548 x 523 x 206 mm

Walls: solid

Handles: 2 shell handles Capacity: 2.2 ft³ / 62 liters

Part number	Base	Weight	Usable h w/o lid	neight w/ lid
50-2422-90-0.EL	flat	6.4 lb / 2.9 kg	8.1 in 206 mm	8.6 in 218 mm
50-2422-90-2.EL	cross stacking	6.8 lb / 3.1 kg	7.8 in 193 mm	8.1 in 193 mm
50-2422-90-3.EL	ribbed	6.8 lb / 3.1 kg	2.8 in 193 mm	3.4 in 193 mm

24 x 22 x 11 in

Exterior dimension: 24 x 22.5 x 11 in / 609 x 572 x 279 mm Inner dimension: 21.6 x 20.5 x 10.4 in / 548 x 523 x 264 mm

Walls: solid

Handles: 2 shell handles Capacity: 2.8 ft³ / 79 liters

Part number	Base	Weight	Usable h w/o lid	
50-2422-110-0.EL	flat	7.3 lb / 3.3 kg	10.4 in 264 mm	10.9 in 277 mm
50-2422-110-2.EL	cross stacking	7.7 lb / 3.5 kg	9.9 in 251 mm	10.4 in 264 mm
50-2422-110-3.EL	ribbed	7.7 lb / 3.5 kg	9.9 in	10.4 in

24 x 22 x 14.5 in

Exterior dimension: 24 x 22.5 x 14.5 in / $609 \times 572 \times 368$ mm Inner dimension: 21.6 x 20.5 x 13.9 in / $548 \times 523 \times 353$ mm

Walls: solid

Handles: 2 shell handles

Capacity: 3.8 ft³ / 108 liters

		Usable height		
Part number	Base	Weight	w/o lid	
50-2422-145-0.EL	flat	9.1 lb / 4.1 kg	13.9 in 353 mm	14.4 in 365 mm
50-2422-145-2.EL	cross stacking	9.6 lb / 4.3 kg	13.4 in 340 mm	13.9 in 353 mm
50-2422-145-3.EL	ribbed	9.6 lb / 4.3 kg	13.4 in 340 mm	13.9 in 353 mm





400 x 300 x 170 mm

16 x 12 x 6.7 in

Inner dimension: 358 x 258 x 165 mm / 14.1 x 10.2 x 6.5 in

Base: flat

Weight: 1.0 kg / 2.2 lb Capacity: 15 liters / 0.53 ft³

Usable height Part number Walls Handles w/o lid w/ lid 2 shell handles 151 mm 165 mm 3-207G-0.EL solid

600 x 400 x 170 mm

24 x 16 x 6.5 in

Inner dimension: 558 x 358 x 165 mm / 22 x 14.1 x 6.5 in

Base: flat

Weight: 1.6 kg / 3.5 lb Capacity: 30 liters / 1.6 ft³

Usable height Part number Walls Handles w/o lid w/ lid 3-208G-0 solid 2 shell handles 149 mm 163 mm

400 x 300 x 220 mm

16 x 12 x 8.7 in

Inner dimension: 358 x 258 x 203 mm / 14.1 x 10.2 x 8.0 in

Base: flat

Weight: 1.5 kg / 3.2 lb

Capacity: 20 liters / 0.71 ft³

Capacity. 20 liters / 0.71 13			Usable h	neight
Part number	Walls	Handles	w/o lid	w/ lid
3-204-0	solid	2 shell handles	203 mm 8.0 in	217 mm 8.5 in

600 x 400 x 220 mm

24 x 16 x 8.7 in

Inner dimension: 558 x 358 x 203 mm / 22.0 x 14.1 x 8.0 in

Weight: 2.5 kg / 5.5 lb Capacity: 40 liters / 1.42 ft3

Part number	Walls	Handles	w/o lid	
3-201-0	solid	2 shell handles	203 mm 8 0 in	218 mm 8 5 in

200 x 150 x 120 mm

8 x 6 x 4.7 in

Inner dimension: 162 x 112 x 97 mm / 6.4 x 4.4 x 3.8 in

Base: flat

Weight: 0.2 kg / 0.5 lb Capacity: 2 liters / 0.07 ft³

Part number	Walls	Handles	Usable h w/o lid	neight w/ lid
3-237-0.EL*	solid	profile	97 mm 3.8 in	112 mm 4.4 in

^{*} Produced in Germany

300 x 200 x 220 mm

12 x 8 x 8.7 in

Inner dimension: 258 x 160 x 203 mm / 10.2 x 6.3 x 8.0 in

Base: flat

Weight: 0.8 kg / 1.7 lb Capacity: 9 liters / 0.32 ft³

Part number	Walls	Handles	Usable h w/o lid	neight w/ lid
3-210-0.EL*	solid	profile	203 mm 8 0 in	218 mm

^{*} Produced in Germany

600 x 400 x 100 mm

24 x 16 x 3.9 in

Inner dimension: 558 x 358 x 83 mm / 22.0 x 14.1 x 3.2 in

Base: flat

Weight: 1.5 kg / 3.2 lb Capacity: 19 liters / 0.67 ft³

Part number	Walls	Handles	w/o lid	eight w/ lid
3-228-0.EL	solid	2 shell handles	83 mm 3 2 in	97 mm 3.8 in

600 x 400 x 325 mm

24 x 16 x 12.8 in

Inner dimension: 558 x 358 x 305 mm / 22.0 x 14.1 x 12.0

Base: flat

Weight: 3.3 kg / 7.3 lb Capacity: 60 liters / 2.12 ft3

Part number	Walls	Handles	w/o lid	w/ lid
3-202-0	solid	2 shell handles	305 mm 12.0 in	319 mm 12.6 in

300 x 200 x 120 mm

12 x 8 x 4.7 in

Inner dimension: 258 x 160 x 97 mm / 10.2 x 6.4 x 3.8 in

Base: flat

Weight: 0.5 kg / 1.2 lb Capacity: 5 liters / 0.17 ft³

Usable height w/o lid w/ lid Part number Walls Handles **97 mm** 3.8 in 112 mm 4.4 in 3-206-0.EL* solid profile

* Produced in Germany

400 x 300 x 120 mm

16 x 12 x 4.7 in

Inner dimension: 358 x 258 x 100 mm / 14.1 x 10.2 x 3.9 in

Weight: 1.0 kg / 2.2 lb

Capacity: 10 liters / 0.35 ft³

Usable height Part number Walls Handles w/o lid 3-203-0.EL solid 2 shell handles 100 mm 114 mm

600 x 400 x 120 mm

24 x 16 x 4.7 in

Inner dimension: 558 x 358 x 100 mm / 22.0 x 14.1 x 3.9 in

Base: flat

Weight: 1.9 kg / 4.1 lb Capacity: 20 liters / 0.71 ft³

Usable height Part number Walls Handles w/o lid w/ lid				
Part number	Walls	Handles	w/o lid	w/ lid
3-200-0.EL	solid	2 shell handles	100 mm 3.9 in	115 mm 4.5 in



SLC lids ESD

Part number	Article	Outer dimension
50-1512-0-0.EL	Loose lid	15 x 12 in 381 x 305 mm
50-2415-0-0.EL	Loose lid	24 x 15 in 609 x 381 mm
50-1512-0-1.EL	Hinged lid	15 x 12 in 381 x 305 mm
50-2415-0-1.EL	Hinged lid	24 x 15 in 609 x 381 mm
50-1512-0-2.EL	Hook-in lid	15 x 12 in 381 x 305 mm
50-2415-0-2.EL	Hook-in lid	24 x 15 in 609 x 381 mm
20-10008.EL	Thermoformed Loose lid	24 x 22 in 609 x 559 in



RAKO lids ESD

Part number	Article	Outer dimension
3-944-0.EL*	Loose lid	200 x 150 mm 8 x 6 in
3-215-0-0.EL*	Loose lid	300 x 200 mm 12 x 8 in
3-214-0-0.EL	Loose lid	400 x 300 mm 16 x 12 in
3-213-0-0.EL	Loose lid	600 x 400 mm 24 x 16 in
3-215-0-1.EL*	Hinged lid	300 x 200 mm 12 x 8 in
3-944-1.EL*	Hinged lid	200 x 150 mm 8 x 6 in
3-214-0-1.EL	Hinged lid	400 x 300 mm 16 x 12 in
3-213-0-1.EL	Hinged lid	600 x 400 mm 24 x 16 in
3-944-2.EL*	Hook-in lid	200 x 150 mm 8 x 6 in
3-215-0-2.EL*	Hook-in lid	300 x 200 mm 12 x 8 in
3-214-2.EL	Hook-in lid	400 x 300 mm 16 x 12 in
3-213-2EL	Hook-in lid	600 x 400 mm 24 x 16 in
20-10010.EL	Thermoformed Loose lid	600 x 400 mm 24 x 16 in

^{*} Produced in Germany



Flexible printed circuit board holders

The Utz PCB holders are highly accurate and adjustable for printed circuit boards with an internal dimension of 21 x 13 inches and an external dimension of 24 x 15 inches. The grooves of the grid are 2 mm wide and 4 mm deep. The numbered grid system ensures the correct spacing of the loaded circuit boards in the holders.

24 x 15 x 5 in 609 x 381 x 127 mm

Inner dimension: 21.6 x 13.1 x 4.4 in / 548 x 33 x 112 mm

Board slot width: 2 mm

Board slot depth: 4 mm

Part number	Usable he w/o lid	ight w/ lid
50-2415-50-50.EL	4.4 in	4.9 in

Short divider

Part number

9-10200.EL

Lid

Part number	Article
50-2415-0.EL	Loose lid
50-2415-1.EL	Hinged lid
50-2415-2.EL	Hook-in lid



Bulk Containers

- 80 | Shipping
- 83 | Modular Design
- 82 | Utz KLAPA
- 83 | UTZ GLT

Bulk containers

The future of bulk containers

BULK

CONTAINERS

The 48" x 45" KLAPA is the next generation collapsible container designed by Utz.

High pressure injection polypropylene and polyethylene provide superior impact resistance to structural foam solutions.

Highest level of design features

- Component parts can be replaced individually providing the lowest service cost in the industry
- Compatible with commonly used container systems
- Tested to AIAG RC-9 Specification
- 3:1 return ratio stacked 9 high empty
- Lightweight design 20% lighter than structural foam alternatives
- Largest access doors in the industry
- Drainage holes in sidewalls and base prevent water accumulation during outdoor storage
- Ergonomically designed latches and assist handle allow easy panel movement
- No specific sequence for folding and unfolding doors
- Label holder, label placard and ID placards are available options
- Available in black or gray

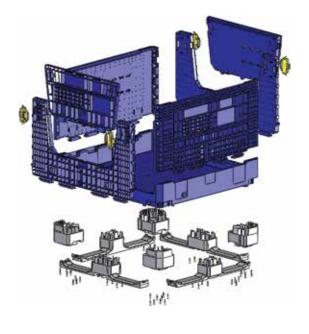


Shipping return ratio

Shipping ratio

Utz offers the most ideal shipping solution in its class per truckload. Our standard 48 x 45 x 34 inch container allows customers to ship 84 containers in the upright position or 252 collapsed containers per truckload, offering a 3:1 return ratio, the most cost effective option in the industry.

ıt



Modular design

Low maintenance cost

Modular design allows containers to be built to order with customer specific feet, runner, wall and drop configurations. All components are attached with snap fit or standard fasteners.



Ergonomics and function

Ergonomically designed latches, handles and sidewalls allow easy assembly. Walls can fold in any sequence.

Drainage holes in sidewalls and base prevent water from accumulating during outdoor storage. This also provides ventilation for faster part cooling post process.



Reinforced bottom

For heavy load conditions, a lateral steel reinforcement can be added to the base for reduced base deflection performance.

utz KLAPA





813 x 762 x 635 mm

Access door:

Long side: 19.5 x 12 in / 495 x 305 mm Load capacity: 1100 lb / 499 kg Capacity: 8.73 ft³ / 248 liters Weight: approx. 51 lb / approx. 23.1 kg

Model: 2 long runners / 3 feet

_			
Part number	Inner dimension	Collapsed height	Usable height
34-3230-25-0	29.1 x 27.1 x 18.8 in 739 x 688 x 477 mm	13 in 330 mm	18 in 458 mm
Thermoform sp	ecialty lid on page 91.		
Part number	Outer dimension	Weight	
50-3230-0			



VDA-GLT 1200 x 1000 x 975 mm

48 x 40 x 38 in

Side access door:

Long side: 770 x 371 mm / 30.3 x 14.6 in Short side: 570 x 371 mm / 22.4 x 14.6 in Load capacity: 500 kg / 1100 lb

Collapsed height: 380 mm / 15.0 in Weight: approx.: 57 kg / approx. 125.7 lb

Part number	Inner dimension	Capacity	Model	
34-121010	1120 x 920 x 767 mm	851 liters	4 feet	



32 x 30 x 34 in

813 x 762 x 864 mm

Access door:

Long side: 19.5 x 12 in / 495 x 305 mm Load capacity: 1100 lb / 499 kg Capacity: 12.7 ft³ / 360 liters Weight: approx. 63 lb / approx. 28.6 kg

Model: 2 lona runners / 3 feet

Part number	Inner	Collapsed	Usable		
	dimension	height	height		
34-3230-34-0	29.1 x 27.1 x 27.8 in	13 in	27 in		
	739 x 688 x 477 mm	330 mm	686 mm		
Thermoform specialty lid on page 91.					

Weight

6.5 lb 2.9 kg



GLT 1200 x 800 x 950 mm

48 x 32 x 37 in

Side access door:

Long side: 770 x 365 mm / 30.3 x 14.4 in Short side: 372 x 365 mm / 14.6 x 14.4 in Load capacity: 500 kg / 1100 lb Collapsed height: 397 mm / 15.6 in

 Weight: approx.: 45 kg / approx. 99.2 lb

 Part number
 Inner dimension
 Capacity
 Model

 34-1208-5900-01
 1120 x 720 x 748 mm 44.1 x 28.3 x 29.4 in
 500 liters 17.6 ft³
 9 feet

 34-1208-5000-01
 1120 x 720 x 748 mm 500 liters
 2 long runners / 3 feet



48 x 45 x 34 in

1219 x 1143 x 864 mm

Access door:

Part number

50-3230-0

Long side: 31.5 x 16.3 in / 800 x 415 mm

Outer dimension

32 x 30 in 813 x 762 mm

Load capacity: 1500 lb / 680 kg Capacity: 29.2 ft³ / 828 liters

Weight: approx. 126 lb / approx. 57.2 kg

Model: runners on all 4 sides

Part number d	dimension	Collapsed height	height
	x x	13 in 330 mm	27 in 686 mm

Injection molded lid found on page 91.

Part number	Outer dimension	Weight
50-4845-0	48 x 45 in 1219 x 1143 mm	15.6 lb 7.0 kg



GLT 1200 x 1000 x 900 / 975 mm

48 x 40 x 35 / 38 in

Side access door:

Long side: 770 x 390 mm / 30.3 x 15.4 in Short side: 570 x 390 mm / 22.4 x 15.4 in Load capacity: 500 kg / 1100 lb

Collapsed height: 406 mm / 16.0 in Weight approx.: 50 kg / approx. 110 lb

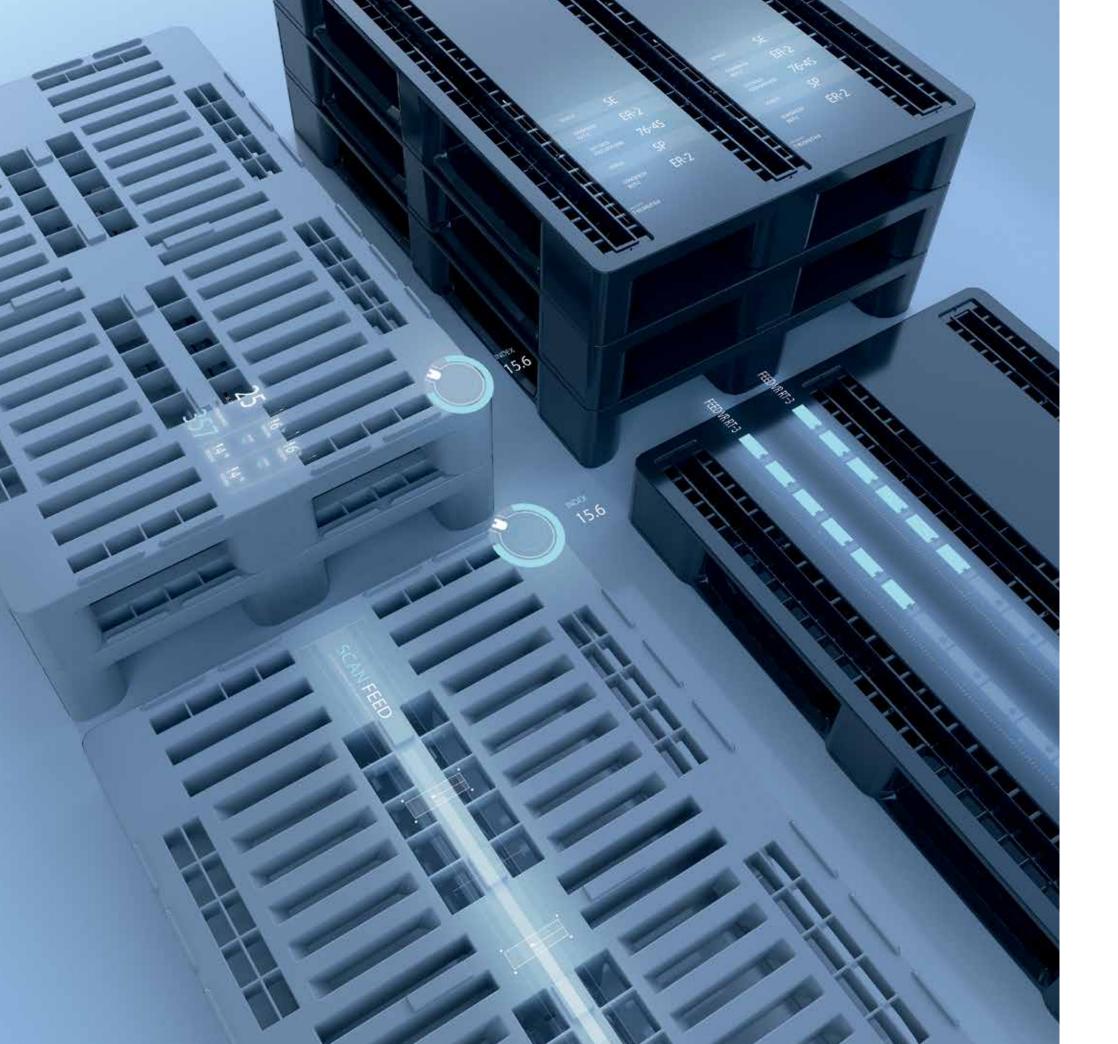
Part number	Outer dimension	Inner dimension	Capacity	Model
34-1210-5017	1200 x 1000 x 900 mm 48 x 40 x 35.4 in	1120 X 920 X 692 mm 44.1 X 36.2 X 27.2 in	715 liters 25.3 ft ³	2 long runners / 3 feet
34-1210-5000R	1200 x 1000 x 975 mm 48 x 40 x 38.4 in	1120 x 920 x 767 mm 44.1 x 36.2 x 30.2 in	790 liters 27.9 ft ³	2 long runners / 3 feet
34-1210-5012R	1200 x 1000 x 900 mm 48 x 40 x 35.4 in	1120 x 920 x 692 mm 44.1 x 36.2 x 27.2 in	715 liters 25.3 ft ³	9 feet
34-1210-5019	1200 x 1000 x 975 mm 48 x 40 x 38.4 in	1120 x 920 x 767 mm 44.1 x 36.2 x 30.2 in	790 liters 27.9 ft ³	9 feet

Load capacity information is valid for area loading at 73.4° F.

We recommend testing the product in advance - Further information at: info.us@utzgroup.com

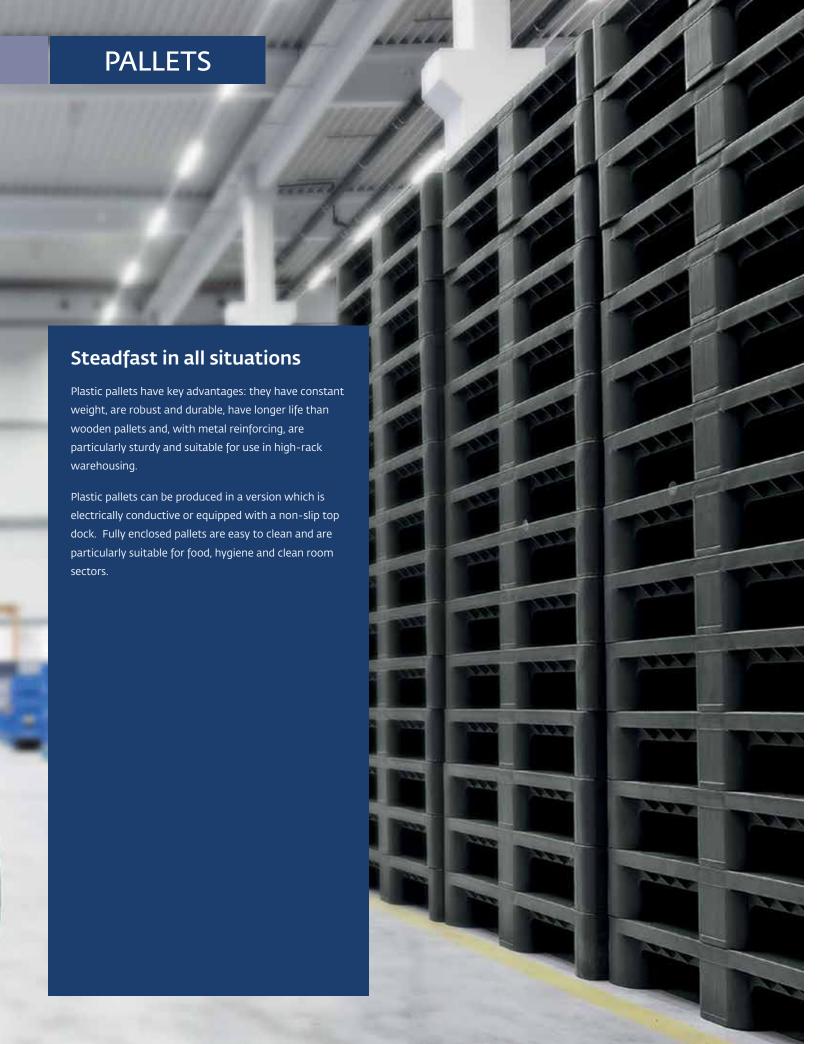
Load capacity information is valid for area loading at 73.4° F.

We recommend testing the product in advance - Further information at: info.us@utzgroup.com



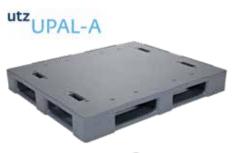
PALLETS

- 86 | Pallets
- 87 | UPAL-A
- 87 | UPAL-N
- 88 | SP14
- 88 | UPAL-H
- 90 | UPAL-I
- 90 | UPAL-S
- 91 | Pallet Lids



UPAL-A Automation friendly and rackable

The UPAL-A is compatible with automated and racking systems without the need of expensive pallet support boards or slave pallets. The pallet has the versatility to be racked in both 40" and 48" orientations. The design of the runners under surface provides optimal performance on belt conveyors, rollers and wheel conveyance.



UPAL-A • 48 x 40 x 6 in

1200 x 1000 x 152 mm

Part number	Model	Runners	Top deck	Weight
33-4840-1	non-reinforced	6	smooth, solid	43.0 lb / 19.6 kg
33-4840-100	reinforced	6	smooth, solid	48.0 lb / 22.1 kg
33-4840-2	non-reinforced	3	smooth, solid	39 lb / 17.8 kg
33-4840-200	reinforced	3	smooth, solid	44 lb / 20.3 kg
2 or 4 seat belts	optional			
Load capacity	reinforced			
static	30000 lb / 13607 k	′O		

Racking weight is based on uniform loads.

dynamic

in racking

We recommend testing the product in specifically intended evironment.

Available in FDA approved, recycled and ESD materials.

6000 lb / 2722 kg

2500 lb / 1134 kg



UPAL-N Space saving, automotive pallet, compatible with Utz straight wall containers

The UPAL-N is a nesting pallet designed for the demands of the automotive industry and other industrial markets. Its durable design extends product life thus reducing cost. The feet are designed with large radius corners and scalloped sidewalls for superior strength.







UPAL-N • 48 x 45 x 6 in

1230 x 1154 x 152 mm

Part number	Return ratio	Feet	Top deck	Weight
33-4845.000	2.0:1	9	open with safety edge	36.3 lb / 16.5 kg
2 or 4 seat belts	optional			
Load capacity				
static	30000 lb / 13607 kg]		
dynamic	4000 lb / 1814 kg			

Available in FDA approved, recycled and ESD materials.



Racking weights are based on uniform loads. Load capacity information is valid for area loading at 73.4° F. We recommend testing the product in advance - Further information at: info.us@utzgroup.com

SP14 Heavy duty structural automotive pallet

The SP14 is a robust automotive and racking solution compatible with Utz straight wall containers. Ford Approved pallet.

SP14

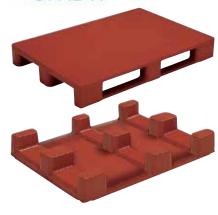


SP14 • 48 x 45 x 6 in 1200 x 1143 x 152 mm						
Part number	Model	Runners	Top deck	Weight		
33-SP14	ford approved	6	grid	65.0 lb / 29.5 kg		
2 or 4 seat belts	optional					
Load capacity	Load capacity					
static	32000 lb / 14515	kg				
dynamic	8000 lb / 3629 kg]				

UPAL-H Clean, stable and closed all around

The UPAL-H is closed on all sides, therefore easy to clean and frequently used in the food, hygiene and clean room Markets. Due to its reinforcement with metal profiles, the pallet is suitable for high-bay spacing.

utz UPAL-H



UPAL-H • 48 x 40 x 6.3 in	1200 x 1	L000 >	(160 mm	
Part number	Model	Runner	Top deck	Weight
33-1210-630 R	non-reinforced	3	smooth	22.5 kg / 49.5 lb
33-1210-634 R	reinforced	3	smooth	26.0 kg / 57.2 lb
33-1210-642 R	non-reinforced	3	with safety edge	22.5 kg / 49.5 lb
33-1210-643 R	reinforced	3	with safety edge	26.0 kg / 57.2 lb
33-1210-600 R	non-reinforced	9	smooth	20.0 kg / 44.0 lb
33-1210-604 R	reinforced	9	smooth	24.0 kg / 52.8 lb
Load capacity	non-reinforced	reinford	ced	
static	6000 kg / 13200 l	b 7500 kg	/ 16500 lb	
dynamic	1500 kg / 3300 lb	1500 kg	/ 3300 lb	
in racking	500 kg / 1100 lb	1300 kg	/ 2800 lb	

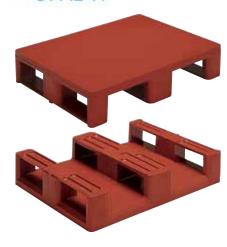
utz UPAL-H



UPAL-H • 1200 x 800 x 160 mm

48 x 32 x 6.3 in				
Part number	Model	Runner	Top deck	Weight
33-1208N-630-0000	Rnon-reinforced	3	smooth	15.5 kg / 34.1 lb
33-1208N-642-0000	Rnon-reinforced	3	with safety edge	15.5 kg / 34.1 lb
33-1208N-643-0500	Rreinforced	3	with safety edge	18.5 kg / 40.7 lb
33-1208N-634-0500	Rreinforced	3	smooth	18.5 kg / 40.7 lb
33-1208N-600-0000	Rnon-reinforced	9	smooth	14.5 kg / 31.9 lb
33-1208N-609-0500	Rreinforced	9	with safety edge	17.0 kg / 37.9 lb
Load capacity	non-reinforced	l reinford	ced	
static	6000 kg / 13200	lb 7500 kg	/ 16500 lb	
dynamic	1500 kg / 3300 ll	1500 kg	/ 3300 lb	
in racking	500 kg / 1100 lb	1300 kg	/ 2800 lb	

utz UPAL-H



UPAL-H • 800 x 600 x 160 mm

32 x 24 x 6.3 in

3 runners

Part number	Model	Top deck		Weight
33-8060-630	non-reinforced	smooth	160 mm / 6.3 in	9.0 kg / 19.8 lb
33-8060-642	non-reinforced	with safety edge	160 mm / 6.3 in	9.0 kg / 19.8 lb
33-8060-632	non-reinforced	with safety edge and 4 recessed areas	160 mm / 6.3 in	9.0 kg / 19.8 lb
Load capacity				
static	3000 kg / 6600 lb			
dynamic	750 kg / 1650 lb			
in racking	500 kg / 1100 lb			

Racking weights are based on uniform loads. Load capacity information is valid for area loading at 73.4° F. We recommend testing the product in advance - Further information at: info.us@utzgroup.com Racking weights are based on uniform loads. Load capacity information is valid for area loading at 73.4° F. We recommend testing the product in advance - Further information at: info.us@utzgroup.com

PALLETS

utz UPAL-I





UPAL-I Robust, resilient and versatile

The UPAL–I is a robust industrial pallet, which is particularly secure in handling. It has a long service life due to its robust construction. Metal profiles can be inserted, depending on requirements, making the pallet suitable for high-bay storage. To protect against slipping, anti-slip pins can be attached to the upper deck and the forklift area.

UPAL-I • 1200 x 1000 x 150 mm

48	v	40	v	6	in
40		40		u	

Part number	Model	Runner	Top deck	Weight
33 -1210I-02	non-reinforced	3	open-work, smooth	14.5 kg / 32 lb
33 -1210I-03	non-reinforced	3	outboard safety edge	14.5 kg / 32 lb
Load capacity				
static	5000 kg / 11000 lb			
dynamic	1500 kg / 3300 lb			
in racking	500 kg / 1100 lb			

UPAL-I • 1200 x 800 x 150 mm

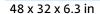
48 x 31 x 6 ir

48 x 31 x 6 in				
Part number	Model	Runner	Top deck	Weight
33-1208I-00 R	non-reinforced	3	open-work, smooth	11.0 kg / 24 lb
33-1208I-01 R	non-reinforced	3	outboard safety edge	11.0 kg / 24 lb
Load capacity				
static	5000 kg / 11000 lb			
dynamic	1000 kg / 2200 lb			
in racking	500 kg / 1100 lb			

UPAL-S Flexible and reinforced, suitable for shelving

The UPAL-S is a robust and resilient pallet with increased stability due to metal profiles, which can be inserted into designated recesses. This reinforcement makes the UPAL-S suitable for high-bay storage. The pallet can be equipped with anti-slip strips.

UPAL-S • 1200 x 800 x 160 mm





Part number	Model	Runner	Top deck	Weight
33-1208S-639-000	R non-reinforced	3	interrupted safety edge, with drain holes	14.0 kg 30.8 lb
33-1208S-739-000	R non-reinforced	3	interrupted safety edge, with drain holes	14.0 kg 30.8 lb
33-1208S-939-000	R reinforced	3	Continuous 20mm safety edge, with drain holes	14.0 kg 30.8 lb
Load capacity	non-reinforced	reinforced		
static	5000 kg / 11000 lb	7500 kg / 165	00 lb	
dynamic 1500 kg / 3300 lb		1500 kg / 330	0 lb	
in racking	500 kg / 1100 lb	1300 kg / 285	0 lb	
LIDAL Cic avail	abla in ECD			

UPAL-S is available in ESD.

Racking weights are based on uniform loads.

Load capacity information is valid for area loading at 73.4° F.

We recommend testing the product in advance - Further information at: info.us@utzgroup.com

Pallet Lids



Part number	Outer dimension	Weight
50-4845	48 x 45 in 1200 x 1100 mm	15.6 lb 7.0 kg



Part number	Outer dimension	Weight
21-10014	1200 x 1000 mm 48 x 40 in	11.0 lb 5.0 ka



Part number	Outer dimension	Weight
21-10041	1200 x 800 mm 48 x 32 in	9.0 lb 4.1 ka



Part number	Outer dimension	Weight
21-10085	800 x 600 mm	4.0 lb
	32 x 24 in	1.8 kg



Space Saving

Nestable

95

95

95

95

	•	
600 x 400 x 253 mm	96 400 x 300 x 225 mm	99 400 x 300 x 225 mm
600 x 400 x 263 mm	97 800 x 600 x 220 mm	99 400 x 300 x 260 mm
600 x 400 x 318 mm	97 800 x 600 x 325 mm	99 400 x 300 x 300 mm
600 x 400 x 365 mm	97 800 x 600 x 465 mm	100 600 x 400 x 225 mm
		100 600 x 400 x 260 mm
		100 600 x 400 x 300 mm
		100 600 x 400 x 320 mm
		101 Lids

Foldable





Nesting containers can be stacked on top of the lid or when empty, nested within one another resulting in up to 75% reduction of the original volume.



600 x 400 x 253 mm

24 x 15.75 x 9.96 in

Inner dimension

Top: 567 x 376 mm / 22 x 14 in Base: 547 x 348 mm / 21.5 in 13.7in

Walls: slotted

Handles: 2 handle slots Weight: 1.9 kg / 6.1 lb Capacity: 50 liters / 1.7 ft³

Part number	Base	Usable height	Stacking Height
45-6425	flat	227 mm / 9.0 in	242 mm / 9.5 in
Dividers			
Part Number Description			
45-4000-1	short solid	divider	
45-4000-2	short slotte	d divider	



600 x 400 x 263 mm

24 x 16 x 10.4 in

Inner dimension

Top: 546 x 371 mm / 21.6 x 14.6 in Base: 520 x 354 mm / 20.5 in 14 in

Walls: solid

Handles: 2 shell handles Weight: 2.8 kg / 6.2 lb Capacity: 47 liters / 1.7 ft³

Part number	Base	Usable height	Stacking Height	Nesting Height
43-6426	flat	235 mm / 9.25 in	251 mm / 9.9 in	109 mm / 4.3 in



600 x 400 x 318 mm

24 x 16 x 12.1 in

Inner dimension

Top: 548 x 371 mm / 21.6 x 14.6 in Base: 516 x 351 mm / 20.3 in 13.8 in

Walls: solid

Handles: 2 shell handles Weight: 3.1 kg / 6.8 lb Capacity: 56 liters / 2.0 ft³

Part number	Base	Usable height	Stacking Height	Nesting Height	
43-6431-2	flat	280 mm / 11 in	295 mm / 9.9 in	109 mm / 4.3 in	

Reinforced base and slotted sides upon request.



600 x 400 x 365 mm

24 x 16 x 14.4 in

Inner dimension

Top: 550 x 365 mm / 21.6 x 14.4 in Base: 252 x 340 mm / 20.5 in 14 in

Walls: solid

Handles: 2 shell handles Weight: 3.0 kg / 6.6 lb Capacity: 66 liters / 2.3 ft³

Part number	Base	Usable height	Stacking Height	Nesting Height	
101-6040-365	flat	338 mm / 13.3 in	353 mm / 13.9 in	125 mm / 4.9 in	



800 x 600 x 220 mm

32 x 24 x 8.7 in

Capacity: 90 liters / 3.2 ft³

Inner dimension: 770 x 570 x 205 mm / $30.3 \times 22.4 \times 8.1$ in Weight: 4.6 kg / 10.1 lb

Part number Collapsed height
9-09014-0220 50 mm / 2 in

800 x 600 x 325 mm

32 x 24 x 12.8 in

Inner dimension: 770 x 570 x 310 mm / $30.3 \times 22.4 \times 12.2$ in Weight: 5.5 kg / 12.1 lb

Capacity: 136 liters / 4.8 ft³

Part number Collapsed height
9-09014-0325 50 mm / 2 in



800 x 600 x 465 mm

32 x 24 x 18.3 in

Inner dimension: 760 x 560 x 449 mm / 29.9 x 22.0 x 17.7 in Weight: 6.9 kg / 15.2 lb

Capacity: 191 liters / 6.7 ft³

Part number	Collapsed height	
34-8646-101	120 mm / 4.7 in	
Lid found on page 67. Part number	Outer dimension	Weight
21-10085	800 x 600 mm 32 x 24 in	4.0 lb 1.8 kg



400 x 300 x 225 mm

16 x 12 x 8.9 in

Inner dimension: $356 \times 257 \times 217 \text{ mm} / 14 \times 10 \times 8.5 \text{ in}$ Usable internal height in stack: 204 mm / 8 in

Weight: 2.0 kg / 4.4 lb Capacity: 19 liters / 0.67 ft³ Foldable Height: 89 mm / 3.5 in

Part number Locking Foldable height
34-4322-0 fitted 89 mm / 3.5 in



96

SPACE SAVING

11.2 KGS 64X54X45 CMS

ZURICH

COLLAPSIBLE

Collapsible container

unit loads during transport.

short time.

The collapsible container is the perfect solution

for high volume, lighter weight products requiring

transportation. The container provides robust stacking

features of a straight wall container, providing secure

When empty, collapsible containers allow for spacesavings of up to 75% of the original volume, resulting

in significantly reduced logistics costs. Since transport and storage space are often scarce and expensive, the

savings will exceed the purchase costs in a surprisingly



400 x 300 x 225 mm

16 x 12 x 8.9 in

Inner dimension: $356 \times 257 \times 217$ mm / $14 \times 10 \times 8.5$ in Usable internal height in stack: 204 mm / 8 in Weight: 2.0 kg / 4.4 lb

Capacity: 19 liters / 0.67 ft³
Foldable Height: 89 mm / 3.5 in

Part number Locking Foldable height
34-4322-0 fitted 89 mm / 3.5 in

Foldable containers simple, space-saving solutions

Save space when transporting empty containers

SPACE SAVING

FOLDABLE

When delivering to branch locations, empty containers are often returned and placed in storage.

Foldable containers can significantly improve the efficient utilization of available transport and storage space. When empty, foldable containers allow for space savings of up to 75% of the original volume.

773

172



400 x 300 x 260 mm

16 x 12 x 10.2 in

Inner dimension: $356 \times 257 \times 257 \text{ mm} / 14.0 \times 10 \times 10.1 \text{ in}$ Usable internal height in stack: 244 mm / 9.6 in

Weight: 2.1 kg / 4.6 lb Capacity: 23 liters / 0.81 ft³ Foldable Height: 89 mm / 3.5 in

Part number Locking Foldable height
34-4326-0 fitted 89 mm / 3.5 in



400 x 300 x 300 mm

16 x 12 x 11.8 in

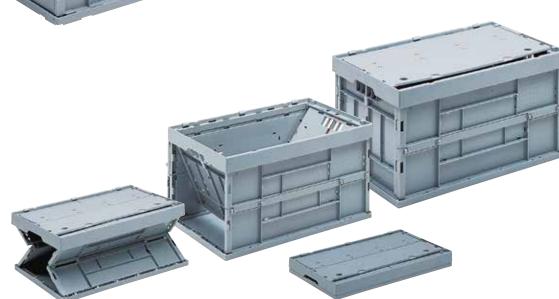
Inner dimension: 356 x 257 x 297 mm / 14.0 x 10.1 x 11.6 in

Usable internal height in stack: 284 mm / 11.2 in Weight: 2.3 kg / 5.1 lb

Capacity: 28 liters / 0.92 ft³ Foldable Height: 89 mm / 3.5 in

Part number Locking Foldable height
34-4330-0 fitted 89 mm / 3.5 in

Reinforced base and slotted sides upon request.





600 x 400 x 225 mm

24 x 16 x 8.9 in

Inner dimension: $556 \times 356 \times 217 \text{ mm} / 21.9 \times 14.1 \times 8.5 \text{ in}$ Usable internal Height in stack: 204 mm / 8 in

Weight: 2.6 kg / 5.7 lb Capacity: 42 liters / 1.5 ft³

Part number	Locking	Foldable height
34-6422-10	none	72 mm / 2.8 in
34-6422-0	fitted	72 mm / 2.8 in



600 x 400 x 260 mm

24 x 16 x 10.2 in

Inner dimension: 556 x 356 x 257 mm / $21.9 \times 14.1 \times 10$ in Usable internal Height in stack: 244 mm / 9.6 in

Weight: 2.8 kg / 6.2 lb Capacity: 49 liters / 1.7 ft³

Part number	Locking	Foldable height
34-6426-10	none	72 mm / 2.8 in
34-6426-0	fitted	72 mm / 2.8 in



600 x 400 x 300 mm

24 x 16 x 11.8 in

Inner dimension: $552 \times 356 \times 297 \text{ mm} / 21.7 \times 14 \times 11.7 \text{ in}$ Usable internal Height in stack: 284 mm / 11.2 inWeight: 2.6 kg / 5.7 lb

Capacity: 58 liters / 2 ft³

Part number	Locking	Foldable height
34-6430N	fitted	78 mm / 3.1 in



600 x 400 x 320 mm

24 x 16 x 12.6 in

Inner dimension: 555 x 355 x 315 mm / 22 x 13.9 x 12.4 in Usable internal Height in stack: 298 mm / 12.4 in

Weight: 2.8 kg / 6.2 lb Capacity: 63 liters / 2.2 ft³

Part number	Locking	Foldable height
34-6432-32	none	59 mm / 2.3 in

Reinforced base and slotted sides upon request.





Lids

Lid, two-piece, hinged on long side

Part number	Nom. size	Model
34-4301-1	400 x 300 mm 16 x 12 in	with opener hole
34-4301-11	400 x 300 mm 16 x 12 in	with handle lug
34-6401-1	600 x 400 mm 24 x 16 in	with opener hole
34-6401-11	600 x 400 mm 24 x 16 in	with handle lug

Lid, two-piece, hinged on short side

Part number	Nom. size	Model
34-4301-2	400 x 300 mm 16 x 12 in	with opener hole
34-4301-21	400 x 300 mm 16 x 12 in	with handle lug
34-6401-2	600 x 400 mm 24 x 16 in	with opener hole
34-6401-21	600 x 400 mm 24 x 16 in	with handle lug

Loose lid

Part number	Outer dimension
3-213Z-0	600 x 400 mm 24 x 16 in

Chemical Concer	ntration	HDPE	LDPE	PA	PC	PP	PS	PVC- Hard	PVC- Soft	SAN
Acetamide	saturated	1/1	1/1	1/0	4/4	1/1	1/1	4/4	0/0	1/1
Acetic acid	50 %	1/1	1/1	4/4	1/2	1/1	2/2	1/2	0/0	0/0
Acetic aldehyde		3/3	2/4	2/0	4/4	3/4	4/4	4/4	0/0	4/4
Acetone		1/1	3/3	1/0	4/4	1/3	4/4	4/4	0/0	4/4
Acetophenone		0/0	1/0	1/0	(4)	1/3	0/4	4/4	4/4	0/4
Acetylene	100%	1/0	1/0	1/0	1/0	1/0	0/0	2/0	4/4	3/0
Acrylonitrile		1/1	1/3	1/0	4/4	3/4	4/4	4/4	4/4	0/0
Adipic acid	saturated	1/1	1/2	0/0	1/1	1/1	1/1	1/3	1/3	0/0
Allyl alcohol	96%	1/3	3/3	3/0	3/3	2/2	2/4	2/3	4/4	4/4
Aluminium chloride	10%	1/1	1/2	1/0	1/0	1/1	1/1	1/1	0/0	1/1
						1/1				
Aluminium oxide	solid	1/1	1/1	1/1	1/1		1/1	1/1	1/1	1/1
Amino acids		1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/0	0/0
Ammonia	25%	1/1	1/1	4/4	4/4	1/1	2/3	1/2	1/3	2/2
Ammonium chloride	aqueous	1/1	1/1	1/0	1/0	1/1	1/1	1/3	1/0	1/1
Ammonium hydroxide	5%	1/1	1/1	1/0	3/4	1/1	1/3	1/1	0/0	0/0
Ammonium oxalate		1/1	1/2	(1)	1/1	1/2	1/1	1/1	0/0	0/0
Ammonium phosphate	each	1/1	1/1	1/0	(2)	1/1	1/1	1/1	1/0	0/0
Ammonium sulfide	each	1/1	1/1	1/0	4/4	1/1	0/0	1/3	1/0	0/0
Amyl acetate (Pentyl acetate)	cacii	1/2	2/3	2/0	4/4	3/4	4/4	4/4	4/4	4/4
Amyl alcohol		1/1	1/2	1/0	1/0	1/1	1/3	2/3	3/0	0/4
Aniline		1/2	1/3	3/4	4/4	2/3	4/4	4/4	4/4	0/4
Antifreeze (motor vehicles)		1/1	1/1	3/3	(1)	1/1	1/1	0/0	0/0	0/0
Aqua Regia		4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	3/4
Barium chloride	saturated	1/1	1/1	1/0	1/0	1/1	1/1	1/3	1/0	1/1
Benzene		3/4	3/4	2/0	4/4	3/4	4/4	4/4	0/0	0/4
Benzene bromide		3/4	4/4	1/0	4/4	4/4	4/4	4/4	0/0	0/0
Benzoic acid	saturated	1/1	1/1	3/4	4/4	1/3	2/2	1/2	1/0	1/1
Benzoic aldehyde		1/3	3/3	3/0	4/4	1/4	4/4	4/4	4/4	0/4
Benzyl alcohol		3/4	4/4	4/4	4/4	4/4	4/4	2/3	0/0	4/4
Boric acid	10%	1/1	1/1	1/0	1/1	1/1	1/2	1/3	1/0	1/1
Brake fluid		1/0	1/0	1/0	4/4	1/1	3/0	1/0	3/0	4/4
Bromine		4/4	4/4	4/4	4/4	4/4	4/4	2/4	4/4	4/4
		3/4		1/0		4/4		3/4		0/0
Butadiene	tooler		4/4		4/4		4/4		0/0	
Butanol	techn. pure	1/1	1/3	1/0	1/0	1/2	1/0	1/3	4/4	0/0
Butyiic acid		3/4	4/4	3/3	4/4	4/4	4/4	2/4	4/4	4/4
Butyl acetate		1/2	2/3	1/0	4/4	3/4	4/4	4/4	4/4	4/4
Calcium chloride	aqueous	1/1	1/1	1/0	1/0	1/1	1/1	1/3	1/0	1/1
Calcium hydroxide	conc.	1/1	1/1	1/0	4/4	1/1	2/2	1/1	1/0	0/0
Calcium hypochlorite	saturated	1/1	1/1	1/4	3/4	1/1	2/3	2/3	3/0	1/1
Calcium sulfate	saturated	1/1	1/1	1/1	1/0	1/1	1/0	1/3	1/0	0/0
Carbazole		1/1	1/1	(2)	4/4	1/1	1/1	4/4	0/0	4/4
Carbon dioxide		1/1	0/0	0/0	0/0	1/1	0/0	1/1	0/0	1/1
Carbon disulphide		4/4	4/4	3/0	4/4	4/4	4/4	4/4	4/4	4/4
Carbon tetrachloride		3/4	4/4	1/0	4/4	4/4	4/4	2/3	4/4	4/4
Caustic potash (Potassium hydro	oxide)50%	1/1	1/1	1/0	4/4	1/1	1/1	1/1	1/0	0/0
Caustic soda solution	30%	1/1	1/1	1/0	4/4	1/1	1/0	1/3	1/3	0/0
Cellosolve acetate	30%	1/1	1/2	0/0	3/4	1/2	4/4	3/4	0/0	0/0
Chlorine	10% wet	3/4	3/4	4/4	2/3	4/4	4/4	1/2	0/0	4/4
Chlorine water		3/0	0/4	4/4	4/4	3/4	4/4	3/3	3/0	3/3
Chlorobenzene		3/4	3/4	4/4	4/4	3/4	4/4	4/4	0/0	0/4
Chloroform		3/4	4/4	3/3	4/4	2/3	4/4	4/4	4/4	4/4
Chromic acid	10%	1/1	1/1	4/4	2/3	1/1	1/1	1/2	0/0	0/3
Citric acid	10%	1/1	1/1	1/1	1/2	1/1	1/2	2/2	1/0	0/0
Cresol	20.0	3/4	4/4	4/4	4/4	2/3	4/4	4/4	4/4	3/4
		3/4	3/4	1/0	3/3	3/4	4/4	2/3		1/3
Cyclohexane		3/4	3/4	1/0	3/3	3/4	4/4	2/3	1/0	1/3
	\ n /d								21:	
Decahydronaphthalene (Decalin	1) 1/2	2/4	1/0	4/4	2/4	4/4	1/2	3/0	3/4	0/0
Dibutyl phtalate		1/3	3/3	1/0	4/4	2/2	4/4	4/4	4/4	0/4
Dichloro benzene	0-	3/3	3/4	(1)	4/4	3/4	4/4	4/4	4/4	4/4
Diethyl benzene		3/4	4/4	(1)	3/4	4/4	4/4	4/4	0/0	0/0
Diethyl ether		3/4	4/4	1/0	4/4	4/4	4/4	3/4	0/0	4/4
Dimethyl formamide		1/1	1/3	1/0	4/4	1/1	4/4	3/4	0/0	4/4
Dioxin 1,4		2/2	2/3	1/0	4/4	3/3	4/4	3/4	4/4	4/4
Ethanol	50%	1/1	1/1	1/0	1/0	1/1	1/0	1/0	3/0	0/0
Ether		3/4	4/4	1/1	4/4	4/4	4/4	3/4	4/4	4/4
Ethyl acetate		1/3	3/4	1/0	4/4	1/3	4/4	4/4	4/4	0/4
Ethyl acrylate	100%	4/4	4/4	1/0	(4)	4/4	0/0	4/4	4/4	0/0
Ethyl alcohol	96%	1/1	1/3	1/0	1/3	1/1	3/4	1/3	3/0	1/3
	50/0	2/3	3/4		4/4	3/4	4/4	4/4	4/4	4/4
Ethyl benzene				(2)						
Ethyl chloride		3/3	3/4	1/0	4/4	3/4	4/4	4/4	4/4	4/4
Ethyl ether	tech. pure	3/0	2/3	1/0	4/4	4/4	4/4	4/4	4/4	0/0
Ethylene cyanacetate		1/1	1/1	0/0	3/4	1/1	2/4	3/4	0/0	0/0
Ethylene glycol		1/1	1/1	1/0	2/3	1/1	1/1	1/1	3/3	1/1
Ethylene oxide		2/3	3/3	3/0	3/4	3/3	4/4	3/4	0/0	0/0
Laryreite Oxide		213	د اد	210	5/4	د اد	7/7	J) 4	310	010
en antara		2.72	2.72	(0)		1 /2	212	2 /2	0.10	0.10
luoride		1/1	1/1	(2)	1/1	1/1	2/2	1/1	0/0	0/0
Fluorine		4/4	4/4	1/4	4/4	4/4	4/4	1/2	0/0	4/4
Formaldehyde	40%	1/2	2/3	1/3	1/2	1/2	4/4	2/3	3/3	0/4
Formic acid	98-100%	1/1	1/2	4/4	3/4	1/3	3/4	3/4	1/3	3/4
nc ucro	30 100/0	-11	-12	-17	314	-13	314	J/ T	213	-14
"lacial acotic acid		040	0/0	A / A	111	1/2	010	0/0	0/0	0/0
Glacial acetic acid		0/0	0/0	4/4	4/4	1/3	0/0	0/0	0/0	0/0
Glucose	each	1/1	1/1	1/1	1/1	1/1	1/1	1/3	1/3	0/0
Slycerine	each	1/1	1/1	1/0	3/3	1/1	1/1	1/1	2/3	1/1
Heating oil		3/3	3/4	1/0	3/3	1/3	3/4	1/1	3/3	1/1
Heptane, n-		2/3	3/4	1/0	1/2	2/4	4/4	2/3	4/4	1/0
Hexane		2/3	4/4	1/0	(2)	2/3	4/4	2/4	4/4	1/1
Hydrazine hydrate	aqueous	1/1	1/0	4/4	(4)	1/1	0/0	1/0	0/0	0/0
Avdrobromic acid	50%	1/1	1/2	4/4	4/4	1/2	4/4	1/1	3/3	0/0

Hydrobromic acid 50% 1/1 1/2 4/4 4/4 1/2 4/4 1/1 3/3 0/0

Hydrochloric acid Hydrocyanic acid Hydrocyanic acid Hydrofluoric acid Hydrofluoric acid Iodine (j) - Tincture Isopropanol (Isopropyl Isopropyl acetate Kerosene Lactic acid Lanolin Lead acetate Lubricating oils Machinen oil Mercuric chloride Mercuric chloride Mercuric chloride Mercuric webyl Methyl acetate Lead acetate Lubricating oils Methyl acetate Lubricating oils Methyl acetate Methyl chloride Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloric acid Perchloric acid	85% techn. pure aqueous 100% 100% pure in solution 100%	1/1 1/1 1/1 1/1 1/1 1/1 1/2 2/2 1/1 1/3 0/0 0/0 1/1 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/1	1/1 1/1 1/1 1/1 1/1 2/3 3/4 1/1 1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1	4/4 (3) 4/4 1/0 1/0 (1) 3/4 1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2) 1/0	2/3 4/4 4/4 3/4 1/2 4/4 4/4 1/2 1/0 1/0 (1) (2) 3/4 1/1 1/1 1/1 4/4	1/1 1/1 1/1 1/2 1/1 2/3 3/3 1/2 1/3 1/1 3/0 1/3 1/1 1/1 1/1	1/1 1/0 4/4 3/3 2/2 4/4 4/4 2/2 1/1 1/1 0/0 0/0 4/4 1/3 1/1 2/2	1/3 1/0 2/3 4/4 1/2 4/4 1/1 2/3 3/3 1/1 1/1 0/0 0/0 1/3 1/1 1/1	0/0 1/0 2/0 4/4 4/4 4/4 0/0 2/3 3/3 1/0 1/3 0/0 0/0 1/0 3/0	0/3 0/0 3/3 3/3 1/4 0/0 0/0 1/1 1/1 0/0 0/0 1/1 1/1 1/1
Hydrocyanic acid Hydrofluoric acid Indine (J) - Tincture Isopropanol (Isopropyl Isopropyl acetate Kerosene Lactic acid Lanolin Lead acetate Luchic acid Lanolin Lead acetate Lubricating oils Menthol Mercuric chloride Mercuric chloride Mercuric chloride Mercuric webyl Metall salts Methanol (Methyl alcc Methoy ethyl loteat Methyl acetate Luchic acid Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Pertroeum spirit Petroleum	85% techn. pure 85% techn. pure aqueous 100% 100% pure in solution shol)	1/1 1/3 1/1 1/2 2/2 1/1 1/3 1/1 1/3 1/1 1/3 1/1 1/1 1/1 1/1	1/1 1/3 1/1 2/3 3/4 1/1 1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1	4/4 1/0 1/0 (1) 3/4 1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	3/4 1/2 4/4 4/4 1/2 1/0 1/0 (1) (2) 3/4 1/0 1/1 1/1	1/1 1/2 1/1 2/3 3/3 1/2 1/3 1/1 3/0 1/3 1/1 1/1 1/1 1/1	4/4 3/3 2/2 4/4 4/4 2/2 1/1 1/1 0/0 0/0 4/4 1/3 1/1	2/3 4/4 1/2 4/4 1/1 2/3 3/3 1/1 1/1 0/0 0/0 1/3 1/1	2/0 4/4 4/4 4/4 0/0 2/3 3/3 1/0 1/3 0/0 0/0 1/0 3/0	3/3 3/3 1/4 0/0 0/0 1/1 1/1 1/1 0/0 0/0 0/0 1/1
lodine ()) - Tincture Isopropanol (Isopropyl Isopropyl acetate Kerosene Lactic acid Lanolin Lead acetate Lubricating oils Machinen oil Menthol Mercuric chloride Mercuric chloride Mercuric chloride Mercury Metall salts Methanol (Methyl alcte Methyl ethyl ketone Methyl ethyl ketone Methyl cyanide Methyl cyanide Mitro acid Minoral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabli Oxalic acid Perchloric acid Perchloric acid Perchloric acid Perchloric acid	85% techn. pure aqueous 100% 100% pure in solution shol)	1/3 1/1 1/2 2/2 1/1 1/3 1/1 1/3 0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1	1/3 1/1 2/3 3/4 1/1 1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1	4/4 1/0 1/0 (1) 3/4 1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	3/4 1/2 4/4 4/4 1/2 1/0 1/0 (1) (2) 3/4 1/0 1/1 1/1	1/2 1/1 2/3 3/3 1/2 1/3 1/1 3/0 1/3 1/3 1/1 1/1 1/1	3/3 2/2 4/4 4/4 2/2 1/1 1/1 0/0 0/0 4/4 1/3 1/1	4/4 1/2 4/4 1/1 2/3 3/3 1/1 1/1 0/0 0/0 1/3 1/1	4/4 4/4 4/4 0/0 2/3 3/3 1/0 1/3 0/0 0/0 1/0 3/0	3/3 1/4 0/0 0/0 1/1 1/1 1/1 0/0 0/0 0/0 1/1
Isopropanol (Isopropyl Isopropyl acetate Kerosene Lactic acid Lanolin Lead acetate Lubricating oils Machinen oil Menthol Merturic chloride Mercury Metall saits Methanol (Methyl alcc Methoy ethyl oleate Methyl explication Methyl ethyl ketone Methyl ethyl ketone Methyl ethyl ketone Methylene chloride Mineral oil Minochloro acetic acid Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric pylirle	85% techn. pure aqueous 100% 100% pure in solution hol)	1/1 1/2 2/2 1/1 1/3 1/1 1/3 0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1	1/1 2/3 3/4 1/1 1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1	1/0 1/0 (1) 3/4 1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	1/2 4/4 4/4 1/2 1/0 1/0 (1) (2) 3/4 1/0 1/1 1/1	1/1 2/3 3/3 1/2 1/3 1/1 3/0 1/3 1/3 1/1 1/1 1/1	2/2 4/4 4/4 2/2 1/1 1/1 0/0 0/0 4/4 1/3 1/1	1/2 4/4 1/1 2/3 3/3 1/1 1/1 0/0 0/0 1/3 1/1	4/4 4/4 0/0 2/3 3/3 1/0 1/3 0/0 0/0 1/0 3/0	1/4 0/0 0/0 1/1 1/1 1/1 0/0 0/0 0/0 1/1
Isopropanol (Isopropyl Isopropyl acetate Kerosene Lactic acid Lanolin Lead acetate Lubricating oils Machinen oil Menthol Mercuric chloride Mercuric chloride Mercuric (Methyl alcc Methoy ethyl exetate Methyl exply (leatyl alcc Methyl acetate Methy	85% techn. pure aqueous 100% 100% pure in solution hol)	1/1 1/2 2/2 1/1 1/3 1/1 1/3 0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1	1/1 2/3 3/4 1/1 1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1	1/0 1/0 (1) 3/4 1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	1/2 4/4 4/4 1/2 1/0 1/0 (1) (2) 3/4 1/0 1/1 1/1	1/1 2/3 3/3 1/2 1/3 1/1 3/0 1/3 1/3 1/1 1/1 1/1	2/2 4/4 4/4 2/2 1/1 1/1 0/0 0/0 4/4 1/3 1/1	1/2 4/4 1/1 2/3 3/3 1/1 1/1 0/0 0/0 1/3 1/1	4/4 4/4 0/0 2/3 3/3 1/0 1/3 0/0 0/0 1/0 3/0	1/4 0/0 0/0 1/1 1/1 1/1 0/0 0/0 0/0 1/1
Isopropyl acetate Kerosene Lactic acid Lanolin Lanolin Lanolin Lanolin Lanolin Lanolin Method Method Mercury Metall salts Methanol (Methyl alcc Methyl ethyl elot Methyl ethyl elot Methyl acetate Methyl cyanide Methyl ethyl ketone Methyle tehyl ketone Methyle chorid Minoral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabli Oxalic acid Perchloric phylene	85% techn. pure aqueous 100% 100% pure in solution hol)	1/2 2/2 1/1 1/3 1/1 1/3 0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1	2/3 3/4 1/1 1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1	1/0 (1) 3/4 1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	4/4 1/2 1/0 1/0 (1) (2) 3/4 1/0 1/1 1/1	2/3 3/3 1/2 1/3 1/1 3/0 1/3 1/3 1/1 1/1 1/1	4/4 2/2 1/1 1/1 0/0 0/0 4/4 1/3 1/1	1/1 2/3 3/3 1/1 1/1 0/0 0/0 1/3 1/1	0/0 2/3 3/3 1/0 1/3 0/0 0/0 1/0 3/0	0/0 1/1 1/1 1/1 1/1 0/0 0/0 0/0 1/1
Lactic acid Lanolin Lead acetate Lubricating oils Machinen oil Menthol Mercury Metall salts Methanol (Methyl alcc Methyl ethyl elct Methyl cyanide Methyl exhyl ectate Methyl cyanide Mitrolorion acetic acid Mitrobenzene Octane, -n Oils and fats, vegetabli Oxalic acid Perchloric acid	techn. pure aqueous 100% 100% pure in solution hool)	1/1 1/3 1/1 1/3 0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	1/1 1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/2 1/1 1/1	3/4 1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	1/2 1/0 1/0 (1) (2) 3/4 1/0 1/1 1/1	1/2 1/3 1/1 3/0 1/3 1/3 1/1 1/1	2/2 1/1 1/1 0/0 0/0 4/4 1/3 1/1	2/3 3/3 1/1 1/1 0/0 0/0 1/3 1/1	2/3 3/3 1/0 1/3 0/0 0/0 1/0 3/0	1/1 1/1 1/1 0/0 0/0 0/0 1/1
Lactic acid Lanolin Lead acetate Lubricating oils Machinen oil Menthol Mercury Metall salts Methanol (Methyl alcc Methyl ethyl elct Methyl cyanide Methyl exhyl ectate Methyl cyanide Mitrolorion acetic acid Mitrobenzene Octane, -n Oils and fats, vegetabli Oxalic acid Perchloric acid	techn. pure aqueous 100% 100% pure in solution hool)	1/1 1/3 1/1 1/3 0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	1/1 1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/2 1/1 1/1	3/4 1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	1/2 1/0 1/0 (1) (2) 3/4 1/0 1/1 1/1	1/2 1/3 1/1 3/0 1/3 1/3 1/1 1/1	2/2 1/1 1/1 0/0 0/0 4/4 1/3 1/1	2/3 3/3 1/1 1/1 0/0 0/0 1/3 1/1	2/3 3/3 1/0 1/3 0/0 0/0 1/0 3/0	1/1 1/1 1/1 0/0 0/0 0/0 1/1
Lanolin Lead acetate Lubricating oils Machinen oil Menthol Mercuric chloride Mercury Metall salts Methanol (Methyl alcc Methoy ethyl oleate Methyl acetate Methyl cyanide Methyl cyanide Methyl cyanide Methyl chyl ketone Methyl cyanide Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloric acid Perchloric ethylene Pertroeum spirit Petroleum	techn. pure aqueous 100% 100% pure in solution hool)	1/3 1/1 1/3 0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	1/3 1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1	1/0 3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	1/0 1/0 (1) (2) 3/4 1/0 1/1 1/1	1/3 1/1 3/0 1/3 1/3 1/1 1/1 1/1	1/1 1/1 0/0 0/0 4/4 1/3 1/1	3/3 1/1 1/1 0/0 0/0 1/3 1/1	3/3 1/0 1/3 0/0 0/0 1/0 3/0	1/1 1/1 0/0 0/0 0/0 1/1
Lead acetate Lubricating oils Machinen oil Menthol Mercury Metall salts Methanol (Methyl alco Methony ethyl oleate Methyl exteate Methyl cyanide Methyl extone Methylenchloride Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetable Ovalic acid Perchloric acid Perchloric octhylene Pertroeum spirit Petroleum	aqueous 100% 100% pure in solution 100%	1/1 1/3 0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	1/1 2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/2 1/1	3/0 (2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	1/0 (1) (2) 3/4 1/0 1/1 1/1	1/1 3/0 1/3 1/3 1/1 1/1 1/1	1/1 0/0 0/0 4/4 1/3 1/1	1/1 1/1 0/0 0/0 1/3 1/1	1/0 1/3 0/0 0/0 1/0 3/0	1/1 0/0 0/0 0/0 0/0 1/1
Lubricating oils Machinen oil Menthol Mercury Metall salts Methanol (Methyl alcc Methyl alcate Methyl cyanide Methyl cyanide Methyl cyanide Methyl cyanide Methyl ethyl ketone Methylen chloride Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetable Oxalic acid Perchloric acid Perchloric acid Perchloric acid	100% 100% pure in solution hol)	0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	2/3 1/4 3/4 1/1 1/1 1/1 1/1 1/1 1/2 1/1 1/1	(2-3) (1) 3/0 4/4 1/0 0/0 2/0 (2)	(1) (2) 3/4 1/0 1/1 1/1	3/0 1/3 1/3 1/1 1/1 1/1	0/0 0/0 4/4 1/3 1/1	0/0 0/0 1/3 1/1	0/0 0/0 0/0 1/0 3/0	0/0 0/0 0/0 1/1
Machinen oil Menthol Mercuric chloride Mercuric chloride Mercury Metall salts Methanol (Methyl alco Methowy ethyl oleate Methyl cyanide Methyl cyanide Methyl cyanide Methyl ethyl ketone Methyl ethyl ketone Methylene chloride Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloric acid Perchloric oethylene Pertroeum spirit Petroleum	100% pure in solution hol) 100%	0/0 1/3 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	1/4 3/4 1/1 1/1 1/1 1/1 1/2 1/1 1/1	(1) 3/0 4/4 1/0 0/0 2/0 (2)	(2) 3/4 1/0 1/1 1/1	1/3 1/3 1/1 1/1 1/1	0/0 4/4 1/3 1/1	0/0 0/0 1/3 1/1	0/0 0/0 1/0 3/0	0/0 0/0 1/1
Menthol Mercuric chloride Mercuric chloride Mercury Metall salts Methanol (Methyl alcc Methoxy ethyl oleate Methyl acetate Methyl cyanide Methyl ethyl ketone Methyle thyl ketone Methyle chloride Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabli Oxalic acid Perchloric acid Perchloric acid Perchloric octlylene Pertroeum spirit Petroleum	100% pure in solution hol) 100%	1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	3/4 1/1 1/1 1/1 1/1 1/1 1/2 1/1 1/1	3/0 4/4 1/0 0/0 2/0 (2)	3/4 1/0 1/1 1/1	1/3 1/1 1/1 1/1	4/4 1/3 1/1	0/0 1/3 1/1	0/0 1/0 3/0	0/0 1/1
Menthol Mercuric chloride Mercuric chloride Mercury Metall salts Methanol (Methyl alcc Methoxy ethyl oleate Methyl acetate Methyl cyanide Methyl ethyl ketone Methyle thyl ketone Methyle chloride Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabli Oxalic acid Perchloric acid Perchloric acid Perchloric octlylene Pertroeum spirit Petroleum	100% pure in solution hol) 100%	1/3 1/1 1/1 1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	3/4 1/1 1/1 1/1 1/1 1/1 1/2 1/1 1/1	3/0 4/4 1/0 0/0 2/0 (2)	3/4 1/0 1/1 1/1	1/3 1/1 1/1 1/1	4/4 1/3 1/1	0/0 1/3 1/1	0/0 1/0 3/0	0/0 1/1
Mercury Metali salts Methanol (Methyl alcc Methoxy ethyl oleate Methyl acetate Methyl acetate Methyl acyanide Methyl ethyl ketone Methylene chloride Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Ovalic acid Perchloric acid Perchloric acid Pertroeum spirit Petroleum	in solution 100%	1/1 1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	1/1 1/1 1/1 1/2 1/1 1/1	1/0 0/0 2/0 (2)	1/1 1/1	1/1 1/1	1/1	1/1	3/0	
Metall salts Methanol (Methyl alcc Methony ethyl oleate Methyl acetate Methyl acetate Methyl vanide Methyl ethyl ketone Methylene chloride Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Ovalic acid Perchloric acid Perchloric acid Perchloric acid Perchloric acid Perchloric acid Perchloric pethylene Pertroeum spirit Petroleum	in solution 100%	1/1 1/1 1/1 1/0 1/1 1/3 4/4 1/1	1/1 1/1 1/2 1/1 1/1	0/0 2/0 (2)	1/1	1/1				1/1
Methanol (Methyl alco Methovy ethyl oleate Methyl actatae Methyl cyanide Methyl ethyl ketone Methylene chloride Mineral oil Monochloro acetic aci Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloric oethylene Pertroeum spirit Petroleum	100% d	1/1 1/1 1/0 1/1 1/3 4/4 1/1	1/1 1/2 1/1 1/1	2/0 (2)			2/2	1/1		
Methoxy ethyl oleate Methyl acetate Methyl acetate Methyl ethyl ketone Methylene chloride Mineral oil Mineral oil Nitric acid Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Ovalic acid Perchloric acid Perchloric acid Perchlore ethylene Pertroeum spirit Petroleum	100% d	1/1 1/0 1/1 1/3 4/4 1/1	1/2 1/1 1/1	(2)	4/4				0/0	0/0
Methyl acetate Methyl (yanide Methyl ethyl ketone Methylene hloride Mineral oil Monochloro acetic aci Nitric acid Nitriobenzene Octane, -n Oils and fats, vegetabl Ovalic acid Perchloric acid Perchloric ethylene Pertroeum spirit Petroleum	d	1/0 1/1 1/3 4/4 1/1	1/1 1/1			1/1	3/4	1/3	3/3	3/4
Methyl cyanide Methyl ethyl ketone Methyle ethyl ketone Methylene chloride Mineral oil Monochloro acetic aci Nitric acid Nitriobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloric oethylene Pertroeum spirit Petroleum	d	1/1 1/3 4/4 1/1	1/1	1/0	3/4	1/2	4/4	4/4	0/0	0/0
Methyl ethyl ketone Methylene chloride Mineral oil Monochloro acetic aci Nitro acid Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloro acid Perchlore ethylene Pertroeum spirit Petroleum		1/3 4/4 1/1			(4)	1/3	4/4	4/4	4/4	4/4
Methylene chloride Mineral oil Monochloro acetic aci Nitric add Nitrobenzene Octane, -n Oils and fats, vegetabl Ovalic acid Perchloro ethylene Pertroeum spirit Petroleum		4/4 1/1	3/4	1/0	4/4	3/4	4/4	4/4	0/0	0/0
Mineral oil Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloric oethylene Pertroeum spirit Petroleum		1/1	4/4	1/0	4/4	1/3 3/4	4/4	4/4 4/4	4/4	4/4
Monochloro acetic aci Nitric acid Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perthoeum spirit Petroleum			2/4	(1)	1/2	1/3	1/1	1/2	0/0	0/0
Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloro ethylene Pertroeum spirit Petroleum	50%	1/1	1/1	4/4	3/4	1/2	2/4	3/4	4/4	0/0
Nitrobenzene Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloro ethylene Pertroeum spirit Petroleum	50%									
Octane, -n Oils and fats, vegetabl Oxalic acid Perchloric acid Perchloro ethylene Pertroeum spirit Petroleum		2/4	3/4	4/4	4/4	3/4	4/4	2/3	0/0	0/3
Oils and fats, vegetable Oxalic acid Perchloric acid Perchloro ethylene Pertroeum spirit Petroleum		3/4	4/4	4/4	4/4	2/4	4/4	4/4	4/4	4/4
Oils and fats, vegetable Oxalic acid Perchloric acid Perchloro ethylene Pertroeum spirit Petroleum		1/1	1/1	1/0	2/3	1/1	4/4	3/4	3/3	1/1
Oxalic acid Perchloric acid Perchloro ethylene Pertroeum spirit Petroleum	٥	1/3	1/3	(2)	(2)	1/3	3/0	1/1	3/3	0/0
Perchloric acid Perchloro ethylene Pertroeum spirit Petroleum	c	1/1	1/1	3/4	1/0	1/1	1/1	1/1	1/1	1/1
Perchloro ethylene Pertroeum spirit Petroleum		-/-	2,2	5/ 1	2,0	-/-	-/-	-/-	-/-	-1-
Pertroeum spirit Petroleum		2/4	2/4	4/4	4/4	2/4	2/3	2/4	3/0	0/0
Petroleum		4/4	4/4	4/4	4/4	4/4	4/4	4/4	0/0	1/1
		2/3	3/4	1/0	3/3	3/4	4/4	2/4	0/0	0/4
	techn. pure	1/3	3/4	1/0	3/0	1/3	4/4	1/0	3/0	3/4
Phenol	100%	2/3	3/3	4/4	4/4	1/2	4/4	4/4	3/0	4/4
Phenyl hydrazine	techn. pure	3/0	0/0	(3)	(3)	3/4	0/0	4/4	0/0	0/0
Phosphoric acid Photo developer	85%	1/1	1/1	4/4	1/2	1/2	0/0	1/2	1/1	0/0
Photo fixer		1/0	1/1	1/0	(2)	1/1	0/0	1/3	1/0	0/0
Plasticisers		1/3	1/3	(2)	(3)	1/3	0/0	0/0	0/0	3/3
Potassium perchlorate	saturated	1/1	1/1	(1)	1/0	1/1	0/0	1/3	3/0	0/0
Potassium permangan		1/3	1/1	4/4	1/0	1/1	1/3	1/3	0/0	1/3
Propane	gaseous	3/4	4/4	1/0	3/4	2/4	4/4	1/2	0/0	0/0
Propylene glycol		1/1	1/1	4/4	2/3	1/1	1/1	3/4	0/0	1/1
Propylene oxide		1/1	1/2	(3)	2/3	1/2	4/4	3/4	0/0	4/4
Pyridine		1/3	0/2	1/0	4/4	3/3	4/4	4/4	4/4	4/4
Resorcinol	saturated	1/1	1/1	4/4	2/3	1/1	2/3	3/4	0/0	0/0
	Jaconaccu	-,-	_, .		_,,	-,-	_,,		-,-	-, 5
Salicylic acid	saturated	1/1	1/1	1/0	1/2	1/1	1/2	2/3	0/0	1/1
Salicylic aldehyde		1/1	1/2	(3)	2/3	1/2	4/4	3/4	0/0	0/0
Silver acetate		1/1	1/1	(2)	1/2	1/1	2/2	2/2	0/0	0/0
Silver nitrate	and:	1/1	1/2	1/0	1/1	1/2	2/3	1/2	1/3	1/2
Sodium acetate Sodium carbonate	each	1/1	1/1	1/0	1/2	1/1	2/2 0/0	2/3 0/0	3/0 0/0	1/1
Sodium carbonate Sodium chloride	each	1/1	1/1	1/0	1/1	1/1	1/1	1/3	1/3	1/1
Sodium dichromate	cacii	0/0	1/1	1/0	1/0	1/1	1/1	1/0	0/0	0/0
Sodium hydroxyde	50%	1/1	1/1	1/0	4/4	1/1	2/2	1/2	0/0	0/3
Sodium hypochloride	50%	3/3	3/3	4/4	(4)	3/3	0/0	1/0	0/0	0/0
Sodium hypochlorite	15%	1/1	1/1	4/4	2/3	1/1	1/1	1/1	0/0	1/1
Stearic acid	crystals	1/3	1/3	1/0	1/2	1/3	1/2	1/2	1/1	1/1
Sulfides		2/3	3/4	0/0	3/4	(2)	4/4	4/4	0/0	0/0
Sulphur dioxide	wet	1/1	1/1	(3)	(3)	1/3	3/4	1/2	0/0	0/0
Sulphuric acid	95%	3/4	3/4	4/4	4/4	3/4	4/4	2/4	0/0	4/4
Tetrahydrofurane		3/4	4/4	1/0	4/4	3/4	4/4	4/4	4/4	4/4
Thionyl chloride	techn. pure	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4
Trichlorethylene	100%	3/4	4/4	3/0	4/4	4/4	4/4	4/4	4/4	0/4
Turpentine oil		2/2	3/4	1/0	4/4	4/4	4/4	2/3	4/4	3/3
Urea (Carbamide etc.)		1/1	1/1	1/0	1/1	1/1	1/2	2/4	3/3	1/1
Vinyl chloride		0/0	0/0	1/1	(4)	(3)	0/0	4/4	4/4	0/0

2 values are stated for each medium, l.h. figure = value at 120°C, r.h. figure = value at +50°C.

The details given are only recommendations with no guarantee, no legal entitlement can be derived from the details given.

Scope

The following conditions are applicable only to business persons, legal entities under public law or of public utilities

Applicability

Our Terms and Conditions of Sale apply to all of our sales. Any change hereto shall be by written agreement. These Terms and Conditions of Sale are a supplement to the IN-COTERMS as published by the International Chamber of Commerce. which are applicable for all of our sales. The applicable edition of the INCOTERMS is that edition noted in the quotation, or that in force at the time of quotation should none be stated in quotation.

Pricing Policies

All prices quoted are in United States Dollars unless otherwise stated on the written offer. Prices do not include applicable sales, use, local or any other taxes which must be charged.

Acceptance

All orders are subject to acceptance by Seller at Seller's home office in Edinburgh, Indiana, Unless otherwise stated, offers are valid for a period of thirty days. Seller reserves the right to withdraw all offers.

The Seller has and remains ownership of all tooling made by the Seller for the Buyer or by a contracted third party, unless agreed to differ-

Errors and Variances

All clerical errors in Seller's quotations, acknowledgements and invoices are subject to correction.

Payment

The net amount of an invoice shall be due 30 days after date of invoice. Delinquent charges are subject to a service charge of one and onehalf percent (1 and 1/2%) per month which is equal to annual percentage rate of 18%, or the maximum rate permitted by law from the due date until the invoice and all service charges have been paid in full.

Cancellations

Orders are not subject to cancellation, except with Seller's consent, and upon terms and conditions that will indemnify Seller against all loss.

Returns

Products may be returned to Seller for credit only with Seller's written permission obtained by purchaser in advance. A restocking / recycling charge of 20% of the sales value will be deducted from the credit by Seller. Buyer is responsible for all freight charges related to the return. Special color items or items

made to customer specific specifications are not subject to return

Transport / Delivery All prices quoted are ex works (EXW) Edinburgh, Indiana (i.e. does not include transportation) unless otherwise stated. Ex works (EXW) orders not picked up within 15 days after notification to Buyer that the goods are ready for shipping, for any reason beyond the Seller's control, including failure of Buyer to give shipping instructions. Seller may store such products at purchaser's risk in a warehouse or vard or upon Seller's premises, and the Buver shall pay all handling, transportation and storage costs at the prevailing commercial rates upon submission of invoices

Alternatively, Seller reserves the right to ship ex works (EXW) orders via common carrier at Buyer's expense, seven days after notification to the Buyer that said goods are ready for shipment.

Seller may make delivery in install ments, unless otherwise expressly stipulated in the contract for sale Each installment may be separately invoiced and paid for when due per invoice, without regard to subsequent deliveries. Delay in delivery of any installment shall not relieve Buyer of obligation to accept subsequent deliveries.

For a custom production which may represent a variation from the standard of order quantities or colors, delivery quantity of up to +/-10% shall be deemed acceptable.

Seller's Delays of Delivery

All delivery dates are approximate dates only, estimated in good faith to the best of the Seller's ability Time shall not be deemed to be of the essence unless specifically agreed to in writing by Seller.

Buyer's Postponement

In case of Buyer's postponement of delivery date. Seller reserves the right to collect payment net thirty days from the day Seller is prepared to make the shipment.

The goods shall remain personal

Title and Lien Rights

property regardless of how they are affixed to Buyer's real property and Seller reserves a purchase money security interest in the goods until the Seller has received full payment of the purchase price. If buyer defaults, Seller shall have the rights of a secured creditor and the reme dies provided by the Uniform Commercial Code. All tooling, dies, jigs, blueprints, plans and specifications in connection with the goods shall remain the sole property of Seller.

Warranty

Relevant for the quality and finish of all goods are the samples or designs which the Buyer makes available to the Seller for examination and references as requested. Any reference to technical standards is an aid to Seller to define product quality and is not be interpreted as a definition of product integrity.

All products sold by Seller are war ranted, for a period of one year from the date of shipment to the original buyer, to be free from de fects in materials and workmanship under normal use and service. Seller's liability under this warranty is limited to the cost of the repair or replacement of any products which fail to comply with foregoing warranty or refund of the purchase price therefore, at Seller's option, and in no event shall Seller be liable for any consequential damages claimed as a result of any breach of the foregoing warranty. This war ranty is contingent upon Buver's compliance with Seller's Claim Procedure. The warranty stated herein is in lieu of all other warranties, expressed or implied including but not limited to merchantability or fitness for a particular use.

Specifications

Product specifications are provided in good faith and to the best of the ability of Seller. Specifications are subject to change without notice. The weights, capacities, dimensions and other specifications are not quaranteed for accuracy. Seller assumes no further liability, expressed or implied.

Infringements

Buyer shall indemnify Seller against all claims arising out of alleged infringement of patents, designs copyrights or trademarks with respect to any goods made to purchaser's specifications.

Use and Safety

Unless specifically stated otherwise, there are no representations or warranties by seller that the goods sold hereunder comply with the requirements of federal, state and local laws and codes as well as industrial codes. Buver acknowledges that it is Buyer's responsibil ity to provide proper safety devices and equipment for the particular application or use intended by the Buyer so as to protect the operator and others from harm, and to comply with all federal, state and local government laws, rules and regulations relating to safety standards and all industry safety standards.

Liability Limitation

In consideration of the express warranty and other terms herein contained, buyer agrees that buyer's exclusive remedy and seller's sole liability on any claim, whether tort, contract or warranty, shall be limited to reimbursement of the purchase price and no other remedy (including but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property or any other incidental loss or damage) shall be available to it, in no event and for no cause whatsoever, including any breach or default by seller.

Force Majeure

Regardless of all written agreements, Seller shall not be responsible for failure to deliver or for delay in delivery of all or part of goods ordered herein by reason of war, civil commotion, labor trouble fire, explosion, windstorms, flood, drought, earthquakes, accident, reduced supply of raw materials, car shortage, embargo, government actions, or any cause whatsoever beyond the control of seller, which interferes with the production consumption or transportation of said goods or the supply of any raw material of which said goods are a

Consequential Damages

Anything to the contrary herein contained notwithstanding. Seller shall not be liable for any consequential, contingent or incidental damages whatsoever.

Commercial Protection

The Seller retains all copyrights and applicable rights to commercial protection, in particular the rights of utilization and exploitation of models, forms, tooling, designs and drawings made by the customer or for the customer under contract by a third party.

Arbitration

All disputes arising out of in connection with the present contract shall be finally settled under the Rules of Arbitration of the American Arbitration Association or the International Chamber of Commerce by one or more arbitrators appointed in accordance with said

Applicable Law

Should a particular term be or become null and void, the remaining terms are unaffected

Any contract for sale by Seller shall be governed and construed according to the laws of the State of Indiana of the United States of

Any action instituted against Seller shall be filed in the local courts of Bartholomew County, Indiana. Buver agrees to submit to the jurisdiction of actions instituted by Seller against Buyer in Bartholomew County, Indiana.

103

Disclaimers

- 1) Due to variances in production processes, the dimensions of the containers can vary up to ±1 percent of the noted dimensions.
- 2) The noted outer length and width of the containers represents the footprints. For exact planning purposes, the metric dimension
- 3) Due to variances in production processes, the listed weight of the containers can vary by 1.5 percent.
- 4) For planning situations where exact weights, dimensions and volumes are required, please contact Georg Utz, Inc.



North American Catalog 2023



