

Safe & Secure Packaging Systems for temperature sensitive Goods



DEEP CHILL
PLUS +

DEEP CHILL
MINUS -

Your Cold Chain Problems Have Ended

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DEEP CHILLED SHIPPER

The Business Idea

Worldwide there is a constant increasing demand for cooling transports.

From these facts the idea arose of developing a packaging system that can be used with normal water ice and also allows an efficient use and storage by not having to be assembled before actual use.

Worldwide there is a constant increasing demand for cooling transports. The demand is in the following business sectors: all kinds of food, pharmaceutical as well as biotech products, electronic parts, industrial adhesives, varnishes and others.

Regarding the cooling system, we differentiate between passive and active cooling.

In the segment of passive cooling systems the use of dry ice is very common. We have pleasure in pointing out the major advantages of our innovative Deep Chill System to you in comparison with dry ice:

In addition to logistic efforts dry ice causes further costs for purchase, storage as well as handling, personnel training and special storage facilities – special fees for declaration and safety are also charged. Furthermore the airlines are entitled to refuse transportation with dry ice.

From these facts the idea arose of developing a packaging system that can be used with normal water ice and also is designed in a manner that allows an efficient use and storage by not having to be assembled before actual use (flat pack principle).

We have learnt that beside the market for refrigerated packaging there also is a great demand in the business sector of laboratory diagnostics. There packaging systems are needed to mainly protect the diagnostic samples against demolition and jolting. In other cases the environment has to be protected against faulty sample packaging and only extreme high / low temperatures have to be avoided for the product.

Especially for these purposes The Courier safe was developed **By Deep Chilled**

Deep Chill is to be seen as a supplier for packaging systems.

The packaging systems are developed and designed particularly to fit in with the customers processes & procedures (purchase, storage and transport systems). Last but not least resulting in significant savings in total costs and greater dispatch efficiency.

Comparison dry ice refrigerating versus innovative Deep Chill systems

Dry ice	Deep Chill
Classification as dangerous goods	No special packaging acc. safety requirements needed *
Special fees for Declaration and Safety	
Transport mainly in cargo aircrafts	Without restriction in passenger aircrafts
Replenishment of dry ice within 48 / 72 hours	Unbroken cold chain up to 96 hours
Bulky packaging and significant weight	Up to 50 % less weight and volume
Intensive handling care by trained personnel	Easy in use & easy to handle, also for non-trained personnel

* presuming that the transported item is a non-dangerous product

The problem cooling with dry ice, is indeed the fact of dry ice being CO₂ in solid form that changes into gaseous form at about -70°C.

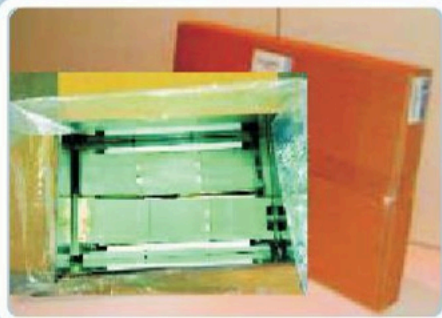
As CO₂ gas is classified as a dangerous good it demands special safety restrictions for storage, handling, transport and of course for carriage by air.

The effect achieved is a substantial reduction of transport costs, storage costs (for the sender) and also avoiding the transport with dry ice (with all the disadvantages such as storage, handling, training for personnel etc.)

In our Deep Chill - Range of products we have standard solutions for different sizes as well as different cold chains. Due to our patented product being well designed, we are able to customise our Deep Chill to suit your very own requirements.

DEEP CHILL PLUS +

standard solutions as well as customised packaging systems. To mention our standard solutions, we are talking about 2l, 5l, 14l and 50l volumes availability. Our boxes are suitable for cold chains in the range of 2 °C to 8 °C for 24 hours, 48 hours and 96 hours.



DEEP CHILL MINUS -

We are able to achieve very low temperature in the region of minus 20 by using a combination of efficient insulation materials and our patented ice plates prefilled with Calcium Chloride. Our Deep Chill minus have achieved -18 degrees for upto 72 hrs. quite effectively.



14 ltrs. Minus Shippers
with CaCl₂ ice plates

COURIERSAFE[®] PLUS +

Our CourierSAFE, being a reusable packaging system, was designed especially for courier services. In order to be able to use the packaging system in the sector of laboratory Diagnostics.



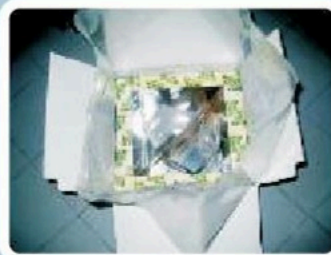
The main advantage of this product compared with competitive products, is the fact that multiple use is feasible and for domestic cold chain transports it is very economical. All components can be easily adjusted to individual customer needs.



Deep Chill 5 ltr. 2 - 8° C. 96 hrs.



14 ltrs. Minus Shippers
For Dry Ice



5 ltrs. Minus Shippers
For Dry Ice

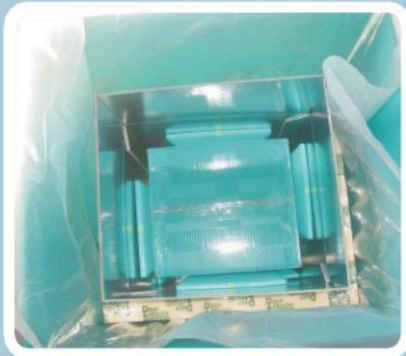


Deep Chill 50 ltr. 2 - 8° C. 96 hrs.



We also design and develop any size as per client requests for cold chain from 24 hrs upto 96 hrs.

Our new range of shippers for API / Glass Bottles
in Polypropylene with side nylon handles



Deepchill Plus 28ltrs 2-8°C 96 hrs



courier safe Plus 10ltrs 2-8°C 60hrs

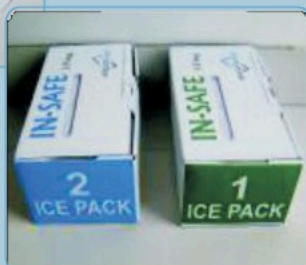


Deepchill Plus 74ltrs 2-8°C 72 hrs



Deepchill Plus 85ltrs 2-8°C 72 hrs

In-Safe for short Cold Chain Duration (2-8°C 8-10 hrs)



Deepchill Plus Thermal Blanket with Ice Plates



The DeepChilledSystem

Product

Six Iceplates with brine solution

Special patented
insulation box

Insulating Laminated
Polyurethane panel

PE-Bag

Special external
cardboard box



Specs For All Deep Chill Shippers

	OD in cm	Usable Dim. in cm	Ice Plates	Wt. less Product
Deep Chill Plus 2-8 deg. for upto 96 hrs				
2 ltr	26 x 26 x 27	14 x 14 x 14	6 x 0.5 ltr	5.5 kg.
5 ltr	36 x 36 x 36	18 x 18 x 18	6 x 1.0 ltr	12 kg.
14 ltr	42 x 42 x 43	24 x 24 x 24	6 x 2.0 ltr	17 kg.
22 ltr	42 x 42 x 60	18 x 18 x 35	6 x 2.0 ltr	19 kg.
40 ltr	50 x 50 x 60	23.5 x 23.5 x 41	6 x 2.0 ltr + 8 x 0.5 ltr	22 kg.
50 ltr coldsafe new	77 x 47 x 41.5	65 x 35 x 27	30 x 0.5 ltr	27 kg.
50 ltr coldsafe PI	77 x 47 x 41.5	64 x 34.5 x 26.5	4x2ltr+6x1ltr+6x0.5ltr	26 kg.
40 ltr moulded	57 x 47 x 40	43 x 33 x 27	2 x 2.0 ltr + 6 x 1.0 ltr	18 kg.

Deep Chill Plus 2-8 deg. for upto 96 hrs in Polypropylene with side handles				
28 ltr	43.5 x 43.5 x 49.5	30 x 30 x 30.5	6 x 2.0 ltr	17 kg.
40 ltr	45.5 x 45.5 x 61	30.5 x 30.5 x 42	2 x 2.0 ltr + 8 x 1.0 ltr	20 kg.
74 ltr	53 x 53 x 77.5	35 x 35 x 60	10 x 2.0 ltr	
85 ltr	56 x 56 x 78.5	38 x 38 x 59	10 x 2.0 ltr	

Deep Chill Minus -18 to -25 deg. for upto 72 hrs				
2 ltr	30 x 30 x 30	14 x 14 x 14	6 x 0.5 ltr with cacl2	6.5 kg.
5 ltr	36 x 36 x 36	18 x 18 x 18	6 x 1.0 ltr with cacl2	13.5 kg.
14 ltr	42 x 42 x 42	24 x 24 x 24	6 x 2.0 ltr with cacl2	18 kg.

Deep Chill Minus 20 deg for 5 - 6 day with dry Ice				
2ltr	30x 30x 30	18x 18x 18	with divider/holder on request	7kg
5ltr	37x 37x 37	25x 25x 25	with divider/holder on request	10kg
14ltr	43x 43x 43	30x 30x 30	with divider/holder on request	14kg
25ltr	48x 48x 45.5	36.5x 36.5x 32.5	with divider/holder on request	20kg

Courier Safe Plus 2-8 deg. for upto 60 hrs. Multiple use				
4 ltr	40 x 30 x 27	21 x 13.5 x 13.5	6 x 0.5 ltr	6.5 kg.
10 ltr	60 x 40 x 27	40 x 20 x 15	9 x 0.5 ltr + 6 x 200 ml	11 kg.
20 ltr	60 x 40 x 42	40 x 20 x 24	10 x 1.0 ltr + 6 x 200 ml	19 kg.

Note. :-

For 2-8 deg. products...Ice packs to freeze at -12 deg. and condition about -2 to -3 deg. prior use.

For 15-25 deg. products...Ice packs to freeze at -12 deg. and condition about +6 deg. prior use.