



# SUMMARY REPORT

## DHL FROZEN SOLUTION SMALL EXTENDED (-20°C)

### Dry Ice Pellets

## 48Hr Delivery + SBS Summer & Static +30°C Ambient Test Profiles

#### Abstract

The following Summary Report demonstrates how the system is conditioned, packed and performs when tested against the 48Hr Delivery +SBS Summer & Static +30°C ambient test profiles.

#### REPORT AUTHOR

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Packaging Engineer

Signature:

Date:20NOV2018

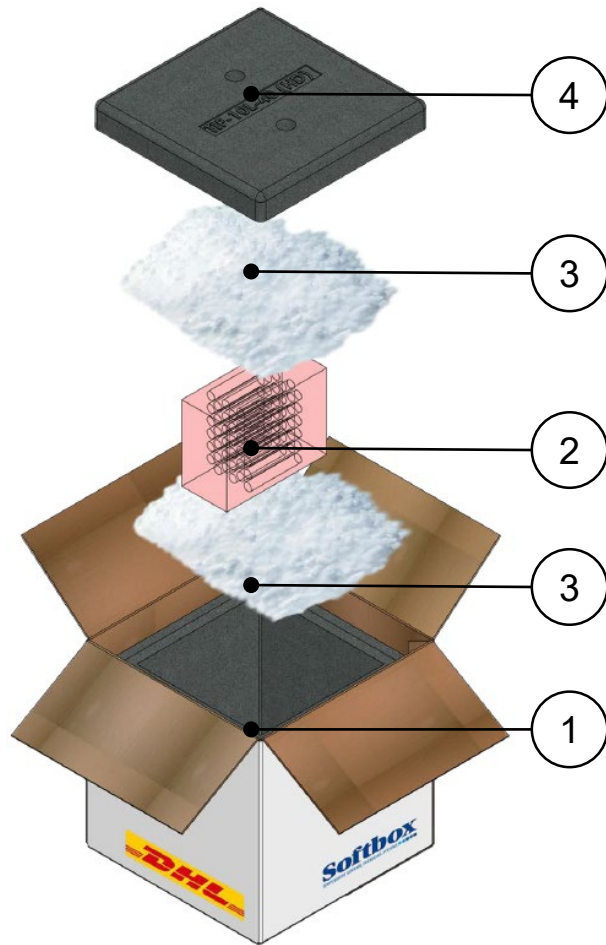
#### REPORT APPROVER

Gavin Hill  
Senior Project Engineer

Signature:

Date:20NOV2018

**SYSTEM DIAGRAM**



**SYSTEM SPECIFICATION**

Item	Components	Quantity	Weights and Dimensions	
1	DHL Frozen Solution Small Extended Base	1	Tare Weight	9.8kg
2	Test Product Load	1	Volumetric Weight	6kg
3	Dry Ice Pellets	8.598kg	Product Dimensions L x W x H	180x145x150mm
4	DHL Frozen Solution Small Extended Lid	1	Shipper Dimensions L x W x H	310x310x320mm

**Freezing Media**

8.598kg of 16mm dry ice pellets; approximate pellet weight – 15g, on packing for delivery, 5.058kg of 16mm dry ice pellets were left on re-packing with product load.



## DHL FROZEN SOLUTION SMALL EXTENDED SYSTEM PACKING INSTRUCTION

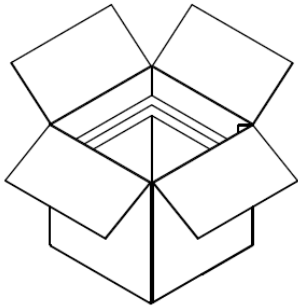


Fig.1  
Remove the Frozen Solution lid and prepare to pack.

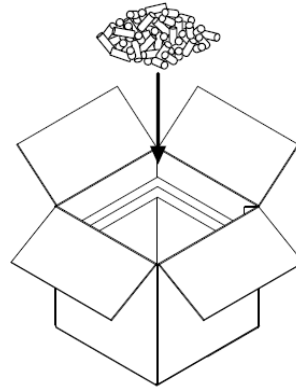


Fig.2  
Place a minimum 2 pellet layer of dry ice in the base of the Frozen Solution.

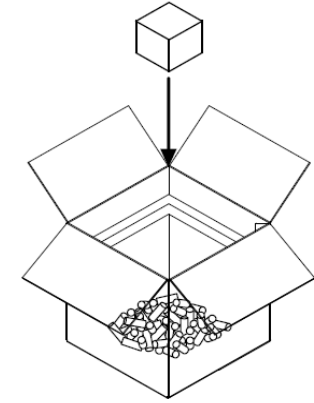


Fig.3  
Place product load on the layer of dry ice pellets.

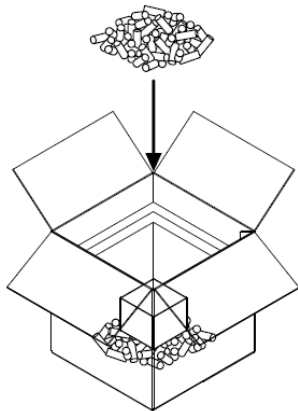


Fig.4  
Place dry ice pellets around the product load.

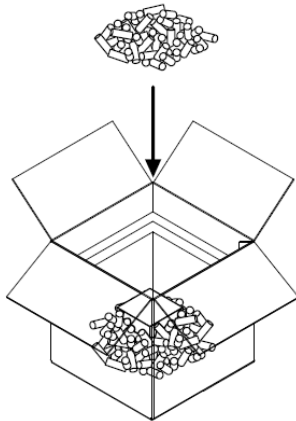


Fig.5  
Place the remaining dry ice on the product load.

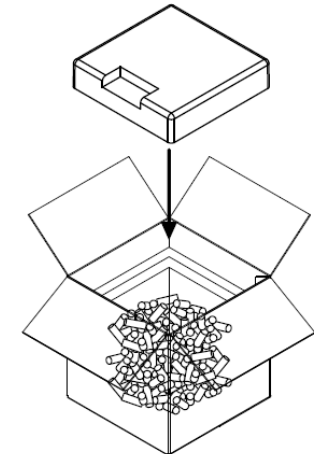
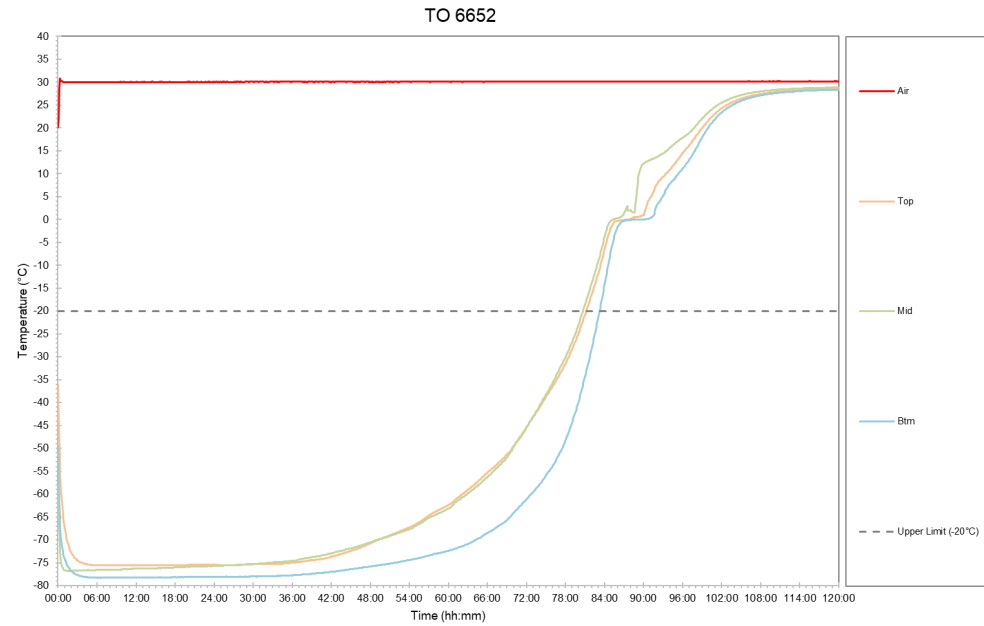
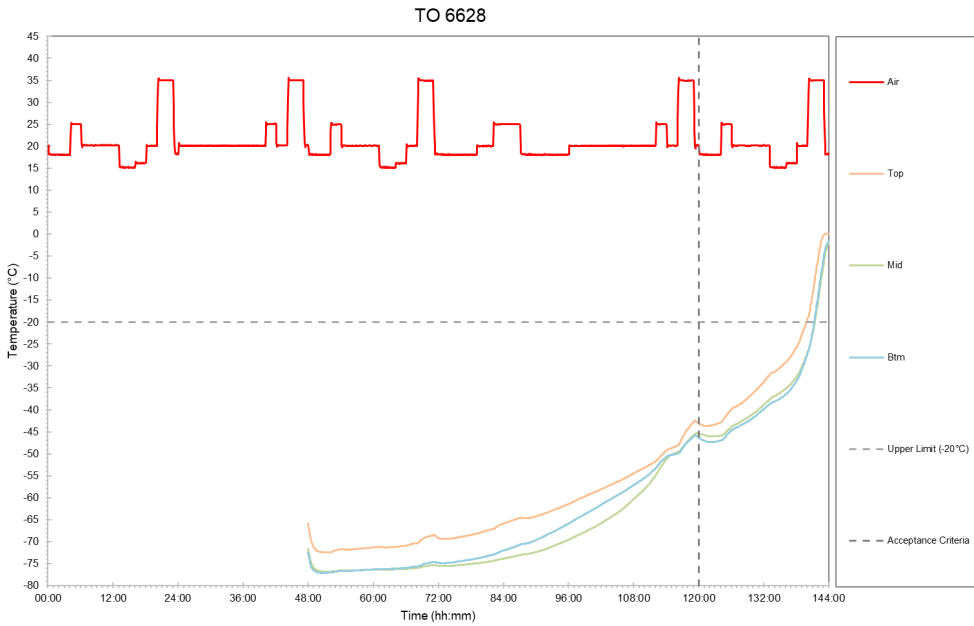


Fig.6  
Place the lid on the Frozen Solution and secure outer carton with tape.



**DHL FROZEN SOLUTION SMALL EXTENDED**  
**SYSTEM TEST RESULTS – 48Hr Delivery + SBS SUMMER & STATIC +30°C**



Test Profile	Product Load	Duration Achieved	Minimum Temperature : °C Maximum Temperature : °C
SBS Summer TO 6628	Full Load	139:55 hh:mm	Minimum Temperature : -77.1°C Maximum Temperature : +0.1°C
Static +30°C TO 6652	Full Load	80:45 hh:mm	Minimum Temperature : -78.3°C Maximum Temperature : +28.8°C