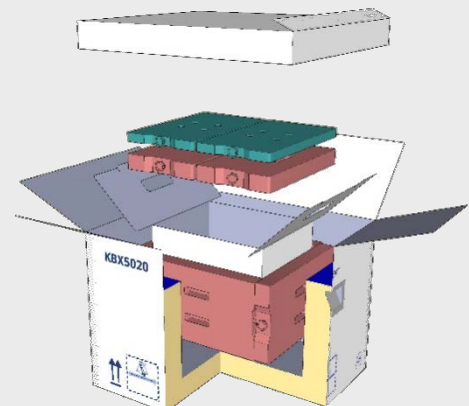


> +2/+8°C Cold Chain Services Packaging



High protection combining air freight cold chain services with adapted packaging

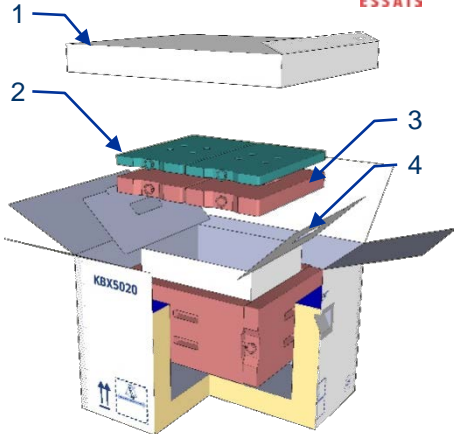
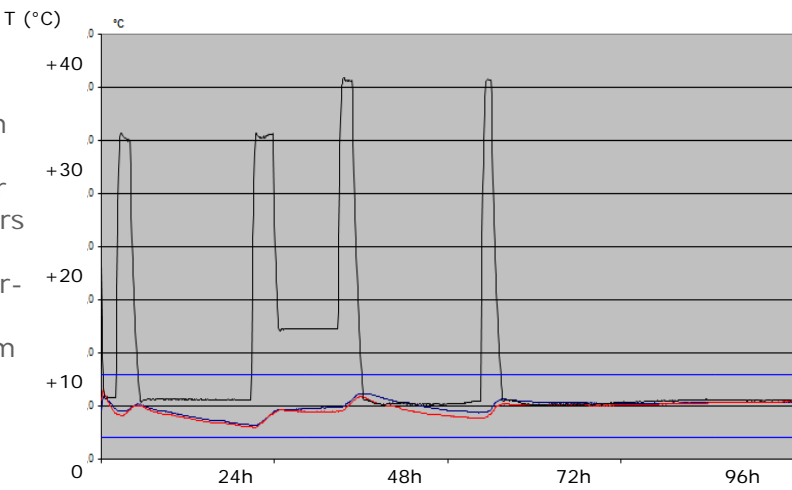
- > **Thermal performance** : designed to be shipped using existing air freight cold chain services
- > **No limit in time while stored in cold rooms**
- > **Cost savings** : lowest price positioning
- > **Logistic savings** : smaller & lighter solutions, flat-pack pallet shippers
- > **Simple & Universal pack-out**



> +2/+8°C Cold Chain Services Packaging

> Technical characteristics

- Insulating material : HD polyurethane foam
- Thermal conductivity : 0.022 W/mK.
- Structure : one piece moulded structure for parcels, 6 flat-pack panels for pallet shippers
- Thermal protection : one unique configuration, mix of +5°C and -20°C water-based thermal stabilizers
- Duration : no limit while stored in cold room
- Qualified by an Accredited testing laboratory



> Packaging Design

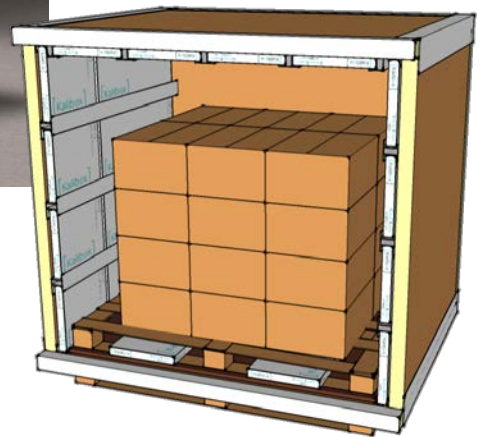
- Insulation : HD polyurethane structure
 - Frozen bricks (-20°C)
 - Refrigerated thermal buffer (+5°C)
 - Customized inner carton to ease handling and protect products.
- No bench time required
 - Simple and universal pack-out
 - Limited number of components

> Dimensions and capacity

Ref Kalibox	External Dimensions (cm)	Volumetric Weight (kg)	Useful dimensions (cm)	Useful Volume (L)	Duration	System Weight
KBX 5020	44.5x39x34	10 kg	25.5x20x14	7L	96h	10.5 kg
KBX 5028	44.5 x 39 x 43	15 kg	25.5 x 20 x 20	10L	120h	11,1 kg
KBX 5057	49x49x50	20 kg	31x31x30	28L	120h	17.5 kg
KBX 5086	68,5x53x48	29 kg	51x35x27	48L	96h	22 kg
KPS 60209	104x74x55	70 kg	81x53x29	120L	96h	46 kg
KPS 50416	120x80x83	131 kg	98x58x47	270L	96h	64 kg
KPS 50567	120x80x105	168 kg	86x58x69	340L	96h	90 kg
KPS 501290	142x94x143	318 kg	122x83x113	1144L	96h	140 kg
KPS 501342	142x94x148	395 kg	122x83x119	1185L	96h	136 kg
KPS 501600	142x104x143	382 kg	122x103x113	1420L	96h	150 kg



> +2/+8°C Standard Packaging



Temperature controlled packaging and pallet shippers

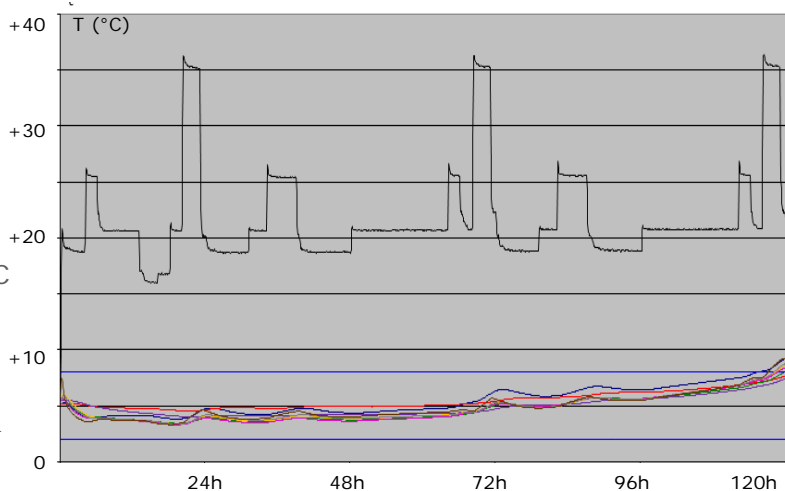
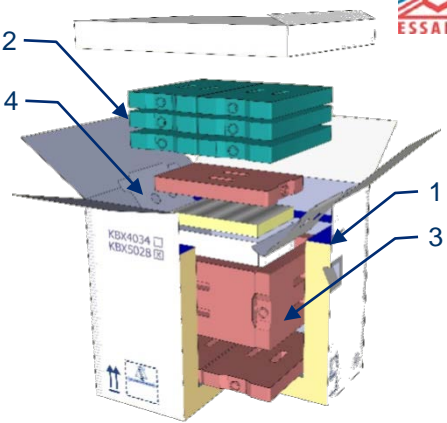
For refrigerated shipments

- > **Thermal performance designed for export shipments:** robust packaging to be shipped in ambient conditions - limited duration in case of storage in cold rooms
- > **Long duration** : qualified for up to 120h
- > **Logistic savings** through flat-pack configuration for pallet shippers
- > **Economical alternative for bulk shipments**
- > **Easy to use:** limited number of components, assembled in minutes
- > **High level of security** : Qualification by an Accredited testing laboratory

> +2/+8°C Standard Packaging

> Technical characteristics

- Insulating material : HD polyurethane foam
- Thermal conductivity : 0.022 W/mK.
- Structure : one piece moulded structure for parcels, 6 flat-pack panels for pallet shippers
- Thermal protection : mix of +5°C and -20°C water-based thermal stabilizers
- Qualified by an Accredited testing laboratory



> Packaging Design

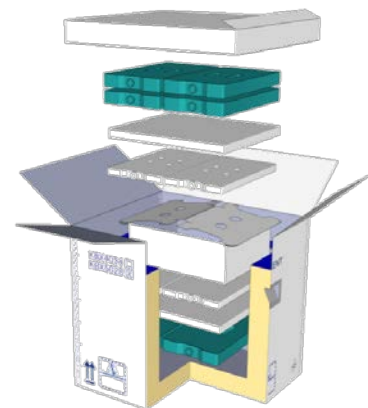
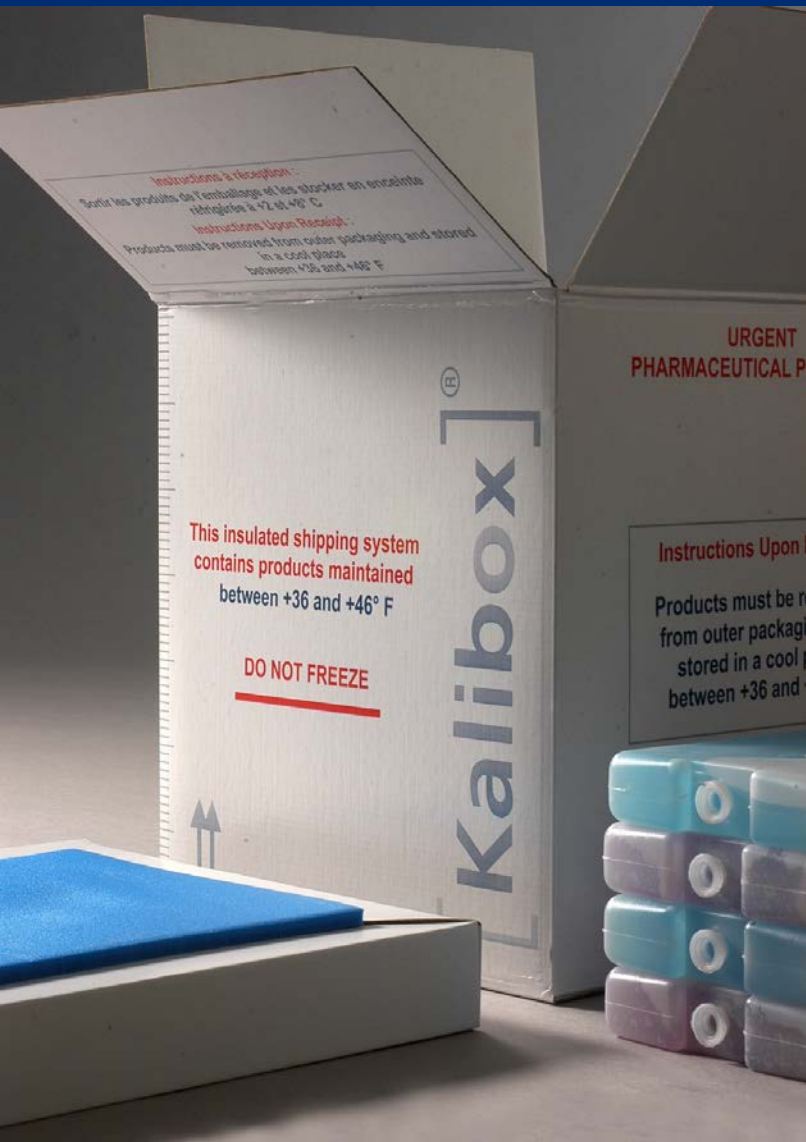
- 1) Insulation : HD polyurethane structure
 - 2) Frozen bricks (-20°C)
 - 3) Refrigerated thermal buffer (+5°C)
 - 4) Customized inner carton to ease handling and protect products for parcel shippers
- No bench time required
 - 2 different pack-outs for Summer / Winter conditions
 - Limited number of standard components

> Dimensions and capacity

Ref Kalibox	External Dimensions (cm)	Volumetric Weight (kg)	Useful dimensions (cm)	Useful Volume (L)	Duration	System Weight STD (winter)
KBX 5020	44.5x39x34	9.8 kg	20x15.5x11	3,5L	48h	11.1 (10.7) kg
KBX 5028	44.5x39x43	12.4 kg	24x16.5x15	6L	72h	14.3 (13.1) kg
KBX 5057	49x49x50	20 kg	31x23x28.5	20L	72h	22.4 (18) kg
KBX 5086	68.5x53x48	29 kg	42x35x27	40L	72h	28 (23.3) kg
KBX 5028	44.5x39x43	12.4 kg	20.5x15.5x11	3.5L	120h	17.5 kg
KBX 7041	49x49x50	20 kg	23x23x15.5	8L	120h	22.4 kg
KBX 8064	64x57x54.5	33 kg	39x30x16	19L	120h	33 kg
KBX 60209	104x74x55	70 kg	81x40x23	74L	120h	59 kg
KPS 50416	120x80x83	131 kg	87x47x48	200L	96h	91 kg
KPS 50770	120x100x107	214 kg	88x68x67	400L	96h	148 kg
KPS 501180D	120x100x149	357 kg	95x74,5x116	800L	115h	122 kg
KPS 501920D	148x128x142	538 kg	124x104x111	1420L	115h	174 kg



> +2/+8°C Packaging - PCM Buffers



Enhanced thermal performance

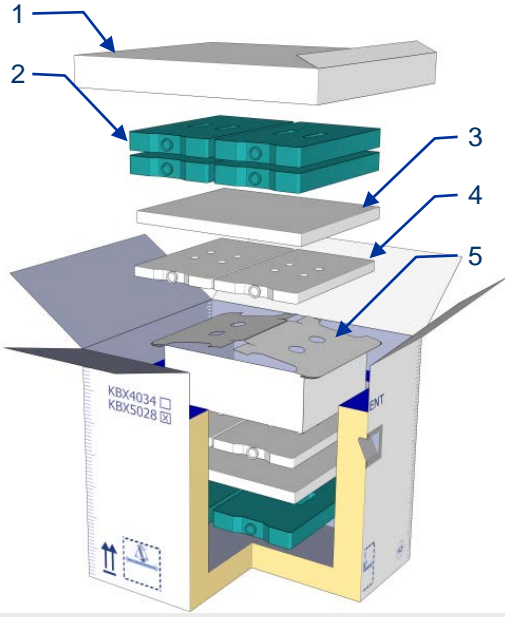
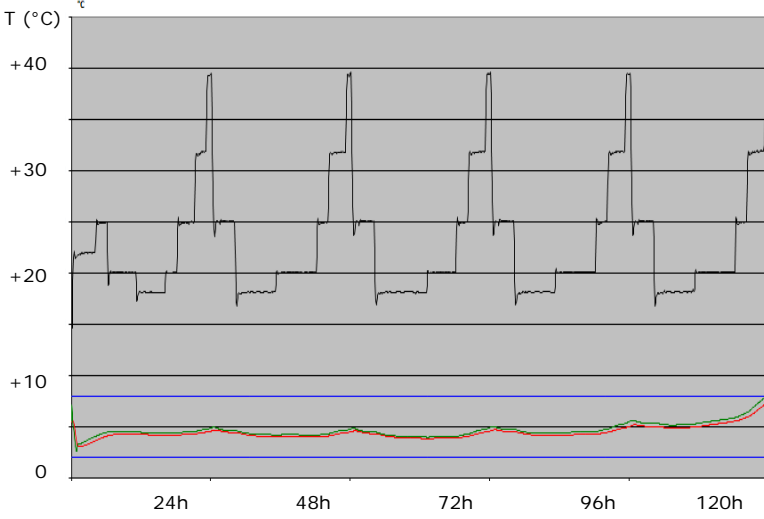
Best cost vs performance solutions for refrigerated products

- > **Superior thermal performance** thanks to the use of specific Phase Change Material ("PCM")
- > **Long duration** : qualified for up to 120h
- > **Simplicity** : Universal configuration, limited number of components
- > **Best price positioning** for export universal pack-out
- > **High level of security** : Qualification by an Accredited testing laboratory

> +2/+8°C Packaging - PCM Buffers

> Technical characteristics

- Insulating material : HD polyurethane foam
- Thermal conductivity : 0.022 W/mK.
- Structure : one piece moulded structure (strong robustness)
- Thermal protection : +5°C Phase Change Material (PCM) allowing universal pack-out.
- Qualified by an Accredited testing laboratory



> Packaging Design

- Insulation : HD polyurethane structure
 - Frozen bricks (-20°C)
 - PUR Spacer
 - Refrigerated specific PCM thermal buffer (+5°C)
 - Customized inner carton to ease handling, protect products and favor air flow.
- No bench time required
 - Simple pack-out
 - Limited number of components

> Dimensions and capacity

Standard Reference	External Dimensions (cm)	Volumetric Weight (kg)	Useful Dimensions (cm)	Useful Volume (L)	System Weight (Kg)	Duration at +23°C
KBX 5028	45 x 39 x 43	15 kg	26,5 x 20,5 x 10	5,4L	12,3 kg	96h
KBX 7041	49 x 49 x 50	20,0 kg	24,5 x 24,5 x 13,5	8L	13,8 kg	120h
KBX 8064	64 x 57 x 53	33,1 kg	37 x 30 x 16	18L	21 kg	120h
KBX 60209	104 x 74 x 55	85 kg	83 x 54 x 21	94L	46 kg	120h



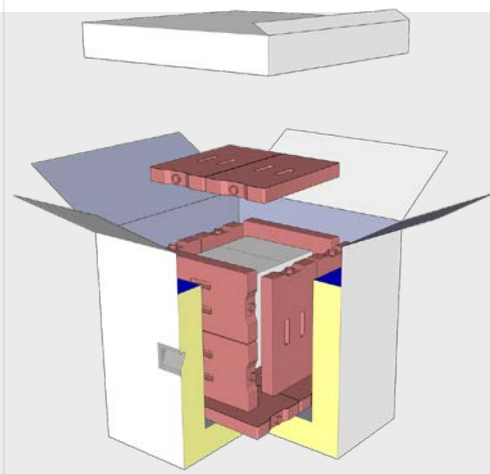
> +15/+25°C Standard Packaging



Insulated packaging and pallet shippers

For Controlled Room temperature products

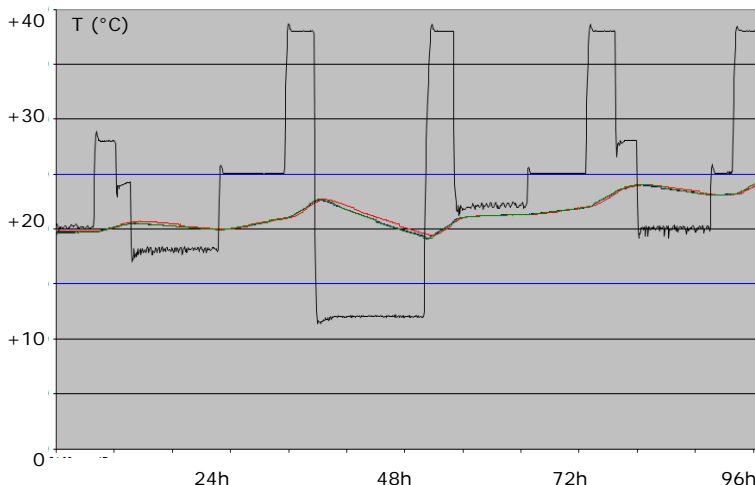
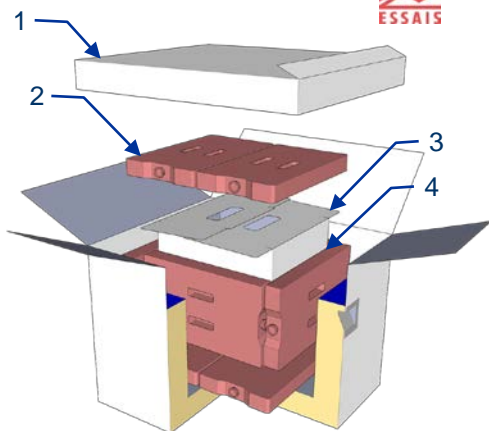
- > **Thermal performance** : good level of thermal stability for the export shipments of temperature sensitive goods
- > **Economical alternative for bulk shipments**
- > **Logistic savings** through flat-pack configuration for pallet shippers
- > **Simple** : & Universal pack-out, one single type of thermal stabilizers



> +15/+25°C Standard Packaging

> Technical characteristics

- Insulating material : HD polyurethane foam
- Thermal conductivity : 0.022 W/mK.
- Structure : one piece moulded structure for parcels, 6 flat-pack panels for pallet shippers
- Thermal protection : +20°C water-based thermal stabilizers
- Qualified by an Accredited testing laboratory



> Packaging Design

- Insulation : HD polyurethane structure
 - +20°C thermal stabilizers surrounding the payload
 - Customized inner carton to ease handling and protect products
- No bench time required
 - Simple and universal pack-out
 - One single type of thermal stabilizers

> Dimensions and capacity

Ref Kalibox	External Dimensions (cm)	Volumetric Weight (kg)	Useful dimensions (cm)	Useful Volume (L)	Duration	System Weight
KBX 5020	44,5x39x34	9.8 kg	25.5x20x14	7L	96h	11,5
KBX 5028	44,5x39x43	12.4 kg	25.5x20x20	10L	96h	12.1
KBX 5057	49x49x50	20 kg	30x30x30	28L	96h	17.3
KBX 5086	68,5x53x48	29 kg	51x35x28	50L	96h	23
KBX 60209	104x74x55	70 kg	81x53x29	125L	96h	43
KPS 50416	120x80x83	131 kg	98x57x52	290L	96h	61
KPS 50567	120x80x105	168 kg	98x57x73	408L	96h	73
KPS 50770	120x100x107	214 kg	98x78x76	580L	96h	94
KPS 501180	120x100x149	357 kg	99x78x118	910L	96h	138
KPS 501290	142x94x143	381 kg	122x83x113	1144L	96h	130
KPS 501342	142x94x148	395 kg	122x83x119	1185L	96h	136
KPS 501600	144x114x142	435 kg	124x104x113	1460L	96h	138

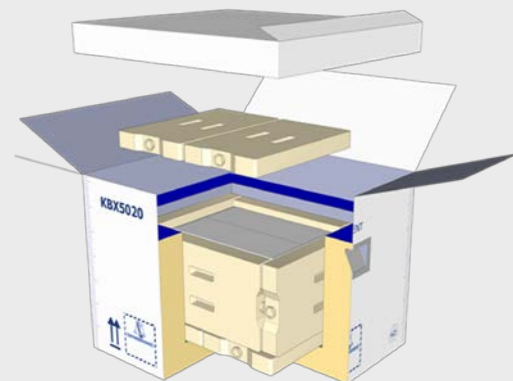


> -20°C Packaging



-25/-15°C Temperature controlled packaging for frozen shipments

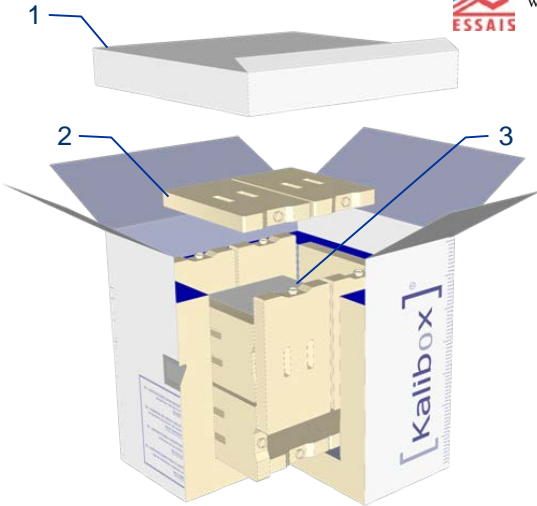
- > Thermal performance : -20°C
- > Reusable system
- > High level of security : Qualification by an Accredited testing laboratory



> -20°C Packaging

> Technical characteristics

- Insulating material : HD polyurethane foam.
- Thermal conductivity coefficient : 0,022W/mK
- Structure : one piece moulded structure (strong robustness)
- Thermal protection : one unique configuration of frozen PCM
- Temperature of phase change of PCM : -22°C. The PCM must be pre-conditioned at a temperature below -22°C
- Qualified by an Accredited testing laboratory



> Packaging Design

- 1) Insulation : HD polyurethane structure
 - 2) Frozen PCM bricks (-22°C)
 - 3) Customized inner carton to ease handling and protect products.
- No bench time required
 - Simple and universal pack-out
 - One type of PCM brick

> Dimensions and capacity

Standard Reference	External Dimensions (cm)	Volumetric Weight (kg)	Useful Dimensions (cm)	Useful Volume (L)	System Weight (Kg)	Autonomy at +20°C
KBX 405.5	31 x 26 x 26	4,1 kg	15 x 18 x 7	1,5L	3,5 kg	48h
KBX 4010	31 x 31 x 32	6,1 kg	15 x 15 x 13	3L	5,1 kg	48h
KBX 6011	35 x 31 x 44	9,1 kg	15 x 7,5 x 26	3L	6,8 kg	62h
KBX 5020	45 x 39 x 34	9.8 kg	26 x 20 x 14	7L	10,5 kg	66h
KBX 5028	45 x 39 x 43	15,1 kg	26 x 20 x 20	10L	12,5 kg	50h
KBX 7041	49 x 49 x 49	19.4 kg	27 x 27 x 26	20L	18,0 kg	95h
KBX 8064	65 x 58 x 55	40 kg	40 x 32 x 28	36L	25,1 kg	73h



> -80°C / -20°C Dry ice Packaging



-80 / -20°C shipments using dry ice sticks

- > Temperature range : -80 / -20°C
- > Packaging adapted to dry ice shipments : no risk of leakage, fume, humidity
- > Strong robustness thanks to molded structure
- > Reusable system
- > High level of security : Qualification by an Accredited testing laboratory

> -80°C / -20°C Dry ice Packaging

> Technical characteristics

- Insulating material : HD polyurethane foam.
- Thermal conductivity coefficient : 0,022W/mK
- Structure : one piece moulded structure (strong robustness)
- Thermal protection : duration potentially superior to 130 hours depending of the quantity of dry ice
- More than 10 sizes available
- Qualified by an Accredited testing laboratory



Molded polyurethane foam is particularly adapted to dry ice shipments :

- high level of insulation,
- strong robustness,
- no risk of leakage or fume



> Standard dimensions and capacity

Standard Reference	External Dimensions (cm)	Volumetric Weight (kg)	Inside Dimensions (cm)	Useful Volume (L)	Packaging Weight (kg)	Dry ice weight (kg)	Duration (hours)
KBX 405.5	31x26,5x25,5	4,2 kg	22x18x14,5	5,5L	1.1 kg	4 kg	70h
KBX 4010	31x31x32,5	6,3 kg	22x22x20	10L	1.6 kg	5.5 kg	90h
KBX 4030	44x44x36	14 kg	35x35x24	30L	2.7 kg	15 kg	126h
KBX 7041	49x49x49,5	24 kg	34x34x34	41L	4.3 kg	16 kg	110h
KBX 5086	69x53x48	35 kg	58x42x35	86L	5.5 kg	30 kg	130h

