



Logistics 30 ltr. KeyKegs, container transport

Keg data:

Diameter: 400 mm, height: 434 mm, height including intermediate sheet: 440 mm
Empty weight: 1.4 kg
Filled weight by hand loading: 31.7 kg
Filled weight on pallet (incl. plastic wrapping, intermediate sheets, security straps): 31.9 kg

Pallet data:

Euro pallet (CP2 pallet): 1200x800x140, weight disposable quality: 20 kg
Block pallet (CP1 pallet): 1200x1000x140, weight disposable quality: 25 kg (not recommended)

Container data:

20' sea container

Inner dimensions: (lxbxh): 5910x2330x2390 mm
Max. weight limit (rating): 24.000 kg
Average tare weight: 2.400 kg
Upper Payload Limit (UPL): 21.600 kg
Lower Payload Limit (LPL): 17.500 kg (common export load)

40' sea container

Inner dimensions: (lxbxh): 12030x2330x2390 mm
Max. weight limit (rating): 30.480 kg
Average tare weight: 3.900 kg
Upper Payload Limit (UPL): 26.580 kg
Intermediate Payload Limit (IPL): 24.000 kg (common export load)
Lower Payload Limit (LPL): 20.500 kg (subsequent road transport, US road restrictions)

40' high cube sea container

Inner dimensions: (lxbxh): 12030x2330x2680 mm
Max. weight limit (rating): 30.480 kg
Average tare weight: 3.900 kg
Upper Payload Limit (UPL): 26.580 kg
Intermediate Payload Limit (IPL): 24.000 kg (common export load)
Lower Payload Limit (LPL): 20.500 kg (subsequent road transport, US road restrictions)

Beside the above mentioned standard dry cargo containers so called pallet wide containers (width=2,4m) exist. However this type is not commonly used and therefore not considered in this overview.



KeyKegs without pallets (hand stacking):

- Amount of KeyKegs per 20' container: 400
5 per row, 16 rows, 5 layers, weight: 12.680 kg (limited by volume)
- Amount of KeyKegs per 20' high cube container: 480
5 per row, 16 rows, 6 layers, weight: 15.216 kg (limited by volume)
- Amount of empty KeyKegs per 20' high cube container: 480
5 per row, 16 rows, 6 layers, plus 100 intermediate sheets (limited by volume)

- UPL 26.580 kg: amount of KeyKegs per 40' container: 825
5 in a row, 33 rows, 5 layers, weight: 26.153 kg (limited by volume)
- IPL 24.000 kg: amount of KeyKegs per 40' container: 757
5 in a row, 33 rows, 4-5 layers, weight: 23.997 kg (limited by weight)
- LPL 20.500 kg: amount of KeyKegs per 40' container: 646
5 in a row, 33 rows, 3-4 layers, weight: 20.478 kg (limited by weight)
- Amount of empty KeyKegs per 40' container: 825
5 per row, 33 rows, 5 layers, plus 172 intermediate sheets (limited by volume, not recommended)

- UPL 26.580 kg: amount of KeyKegs per 40' high cube container: 838
5 in a row, 33 rows, 5-6 layers, weight: 26.565 kg (limited by weight)
- IPL 24.000 kg: amount of KeyKegs per 40' high cube container: 757
5 in a row, 33 rows, 4-5 layers, weight: 23.997 kg (limited by weight)
- LPL 20.500 kg: amount of KeyKegs per 40' high cube container: 646
5 in a row, 33 rows, 3-4 layers, weight: 20.478 kg (limited by weight)
- Amount of empty KeyKegs per 40' high cube container: 990
5 per row, 33 rows, 6 layers, plus 206 intermediate sheets (limited by volume)

KeyKegs on pallets (euro pallets):

- Amount of KeyKegs per 20' container: 264
11 pallets, 4 layers per pallet
height: $4 \times 44\text{cm} + 14\text{cm} = 190\text{cm}$
weight: $264 \times 31.9\text{kg} + 11 \times 20\text{kg} = 8.642\text{kg}$ (limited by volume)

- Amount of KeyKegs per 20' high cube container: 330
11 pallets, 5 layers.
height: $5 \times 44\text{cm} + 14\text{cm} = 234\text{cm}$
weight: $330 \times 31.9\text{kg} + 11 \times 20\text{kg} = 10.747\text{kg}$ (limited by volume)

- Amount of KeyKegs per 20' high cube container: 330
11 pallets per layer, 2 pallets stacked, lower pallets 3 layers, upper pallets 2 layers.
height: $5 \times 44\text{cm} + 2 \times 14\text{cm} = 248\text{cm}$
weight: $330 \times 31.9\text{kg} + 22 \times 20\text{kg} = 10.967\text{kg}$ (limited by volume)

- UPL 26.580 kg: amount of KeyKegs per 40' container: 552
23 pallets, 4 layers per pallet
height: $4 \times 44\text{cm} + 14\text{cm} = 190\text{cm}$
weight: $552 \times 31.9 + 23 \times 20 = 18069\text{kg}$ (limited by volume)



-IPL 24.000 kg: amount of KeyKegs per 40' container: 552 (same as above).
-LPL 20.500 kg: amount of KeyKegs per 40' container: 552 (same as above)

-UPL 26.580 kg: amount of KeyKegs per 40' high cube container: 690
23 pallets 5 layers.
height: $5 \times 44\text{cm} + 14\text{cm} = 234\text{cm}$
weight: $690 \times 31.9 + 23 \times 20 = 22.471\text{kg}$ (limited by volume)
-IPL 24.000 kg: amount of KeyKegs per 40' high cube container: 690 (same as above)
-LPL 20.500 kg: amount of KeyKegs per 40' high cube container: 624
23 pallets, 12 pallets 5 layers, 11 pallets 4 layers
height: $5 \times 44\text{cm} + 14\text{cm} = 234\text{cm}$ and $4 \times 44\text{cm} + 14\text{cm} = 190\text{cm}$
weight: $624 \times 31.9 + 23 \times 20 = 20.366\text{kg}$ (limited by weight)

-UPL 26.580 kg: amount of KeyKegs per 40' high cube container: 690
23 pallets per layer, 2 pallets stacked, lower pallets 3 layers, upper pallets 2 layers.
height: $5 \times 44\text{cm} + 2 \times 14\text{cm} = 248\text{cm}$
weight: $690 \times 31.9 + 46 \times 20 = 22.931\text{kg}$ (limited by volume)
-IPL 24.000 kg: amount of KeyKegs per 40' high cube container: 690 (same as above)
-LPL 20.500 kg: amount of KeyKegs per 40' high cube container: 612
23 pallets per layer, 2 pallets stacked, 13 lower pallets: 2 layers, 10 lower pallets: 3 layers, upper pallets: 2 layers
height: $5 \times 44\text{cm} + 2 \times 14\text{cm} = 248\text{cm}$
weight: $612 \times 31.9 + 46 \times 20 = 20.443\text{kg}$ (limited by weight)

-Amount of empty KeyKegs on pallets per 40' high cube container: 690
23 pallets per layer, 2 pallets stacked, lower pallets 3 layers, upper pallets 2 layers