The Handling Guide For GCUBE IBC™
This guide shall give answers to the most frequent asked questions upon the handling of our GCUBE IBC™.

The responsibility of choosing the right GCUBE IBC™ in accordance to the filling goods and shipment is up to its consignor. This is according to the international transport regulations for hazardous materials (e.g. ADR/RID, IMDG-Code).

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GCUBE IBC™ are manufactured in order to secure a safe and efficient transport of liquid goods, also for hazardous materials. All GCUBE IBC™ are composed by a galvanized and welded steel cage which is mounted on a wooden, hybrid or plastic pallet.

The inner receptacle is made of UV-stabilized polyethylene (PE-HD) and comes with different lid and discharge units on top and front site.

UN rated GCUBE IBC™ carry the homologation UN31HA1/Y/100/…

**Traceability** by coded and direct reading manufacturing data.
When using the GCUBE IBC™ for the onsite handling the internal, national and - wherever required - international safety regulations are effective.

GCUBE IBC™ can be used for active storage according to the TRbF 20 (Läger). The declaration of the manufacturer can be marked on the front label plate.

GCUBE IBC™ are available in versions which are compatible with food and high grade products, according to the regulations (EG) No. 1935/2004 (EU) Nr. 10/2011.

Standard GCUBE IBC™ are eligible for the usage in Ex-Zone 2. For the usage in Ex-Zone 1 and for the transportation of flammable and combustible liquids (Dangerous goods class 3) with a minimum ignition energy of 0.2 mJ or more (explosion groups IIA and IIA/B) the GCube Elektron shall
be used. The referring safety regulations can be found on the front label plate and have to be obeyed.

Light sensitive products can be filled into GCUBE IBC™ with white or black colored receptacles which protect against visible and UV light.
GCUBE IBC™ shall be moved with industrial trucks (e.g. forklift, pallet jack). Before lifting the complete fork shall be below the pallet.

If the primarily usage are pallet jacks a skid pallet is recommended; for forklifts our hybrid frame pallet is recommended.

GCUBE IBC™ are not eligible for crane lifting.

Damaged GCUBE IBC™ shall be withdrawn from circulation and blocked for further usage.
The filling of the GCUBE IBC™ shall be done through the filling opening on the top.

When closing the lid and plug the following torque specification has to be fulfilled:

Screw cap DN150 (6’’): appr. 80 Nm
Screw cap DN225 (9’’): appr. 100 Nm
Optional 2” bung: appr. 20 Nm

Greif recommends to place a tamper-evident sealing onto the lid (e.g. pull-tight cable seal).
GCUBE IBC™ can be equipped with lids which can be handled in automatic filling lines.

Warm fillings can be done up to a temperature of 80°C provided that the filling process is done under a surrounding with room temperature (approx. 20°C). After the filling the filling good needs to cool down before the IBC can be closed.

Exception: Venting system with proper airflow inside of the lid.
Transport stacking
Up to two GCUBE IBC™ can be stacked on each other during transport. The maximum load (in kg) of the lower IBC has to be obeyed and can be found on the label plate. The pallet of the top IBC has to be accurately fitted on the lower IBC.

Example:
18 GCUBE IBC™ can be loaded inside of one ISO container (20’). The placement of the IBC shall be done as shown below:

Loader and driver are responsible for the proper loading and the bracing.
Multiple GCube IBC™ can be placed on each other while resting. The exact number depends on the density of the filling good respectively the gross weight and the maximum stacking weight which can be found on the front label plate (declaration in kg).

Example:

The pallet of the top IBC has to be accurately fitted on the lower IBC.
The discharge valve on the bottom is secured three times. The handle of the butterfly valve is fixed with a locking screw which needs to be opened before moving it. The front screw cap protects the connecting thread and the aluminum seal foil serves as tamper-evident cover.

Prior to the discharge a check of a tight and precise fit of the used hose connection has to be done. It is recommended to fix the hose or pipeline secure and close to the valve.

A preheating of the filling good prior to the discharge has to be limited to six hours in case the temperature of the filling good is maximum 70°C over this period.
The ends of the discharge valve can be equipped with three different connection formats:
- DN50 (2") with external thread S60x6 or
- DN50 (2") with camlock male
- DN80 (3") with external thread S100x8

The front thread on the camlock male is **not allowed** to be used as connection thread for hoses or pipelines!

The discharge has to be done with a proper camlock female coupler.
Return of empty GCUBE IBC™
We recommend to use our provided recollection service with reference to our terms and conditions.

GCUBE IBC™ comply with the guidelines 94/62/EG (packaging waste).

Please find more information on the internet: www.earthminded.com

Our technical service department and our sales team will help you with all further topics and questions.
Certificates

ISO 9001
GCUBE IBC™ are DIN ISO 9001 : 2015 certified (certificate reg. No. 01 100 1401108).

Further Certifications:
ISO 14001: 2015
ISO 50001: 2011
FSSC 22000 + ISO/TS 22002-4
Kosher/Halal