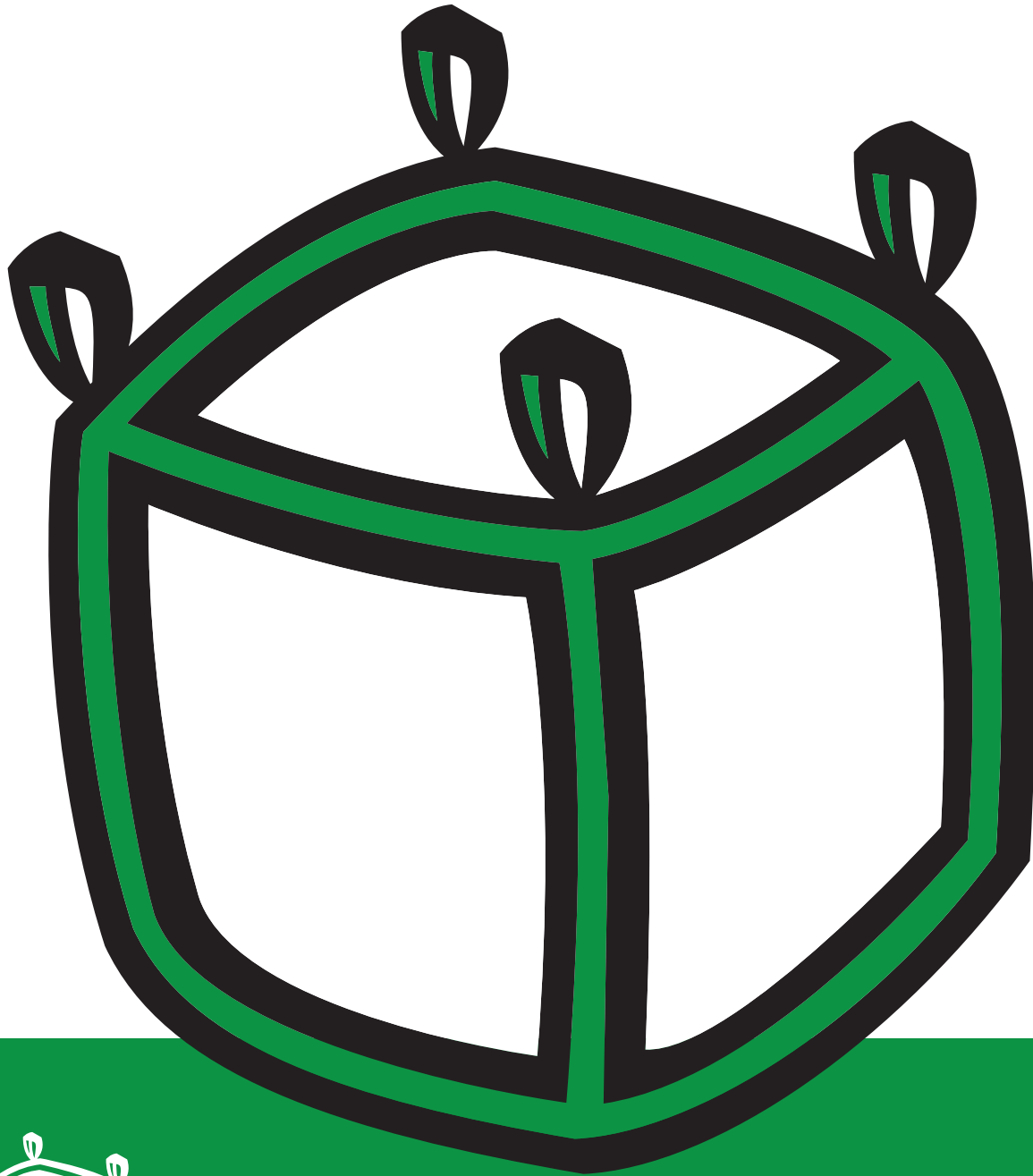


FIBC Handling Guidelines

Part 1: Storage of Empty FIBCs



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Flexible Intermediate Bulk
Container Association

Storage of Empty FIBCs

Whether you have just purchased new FIBCs, or used FIBCs, it is very important to take great care in storing them properly until you are ready to fill them with product.

ALWAYS

Select the right FIBC for the job in consultation with the manufacturer or supplier.

Store empty FIBCs (new or used) inside a safe, clean facility or warehouse which will protect them from the UV rays of sunlight and the moisture of inclement weather.

Cover any FIBCs that would be exposed to dirt, dust or moisture inside a facility or warehouse.

WARNING

Beware of Sunlight & UV Rays:

- » Always protect your FIBCs from sunlight and the harmful effects of UV rays.
- » Over time, exposure to UV rays will weaken the strength of a FIBC.

Beware of Inclement Weather (rain, snow, etc.)

- » Always protect your FIBCs from inclement weather (rain, snow, etc.)
- » Over time, exposure to inclement weather could significantly weaken the strength of a FIBC.

Beware of Water or Moisture Contamination Inside Storage Facilities.

- » Always try to store your empty FIBCs inside a covered facility or warehouse that is free from any water or moisture contamination that could come into contact with your FIBCs and damage them.

Outside Storage is Not Recommended.

- » Storing empty FIBCs outside is not recommended, but if you do, you should always cover them with some type of material that will prevent their exposure to UV rays and inclement weather. However, FIBCA does not support or endorse this type of outdoor storage, and this would be solely at your own risk. There is no guarantee that FIBCs stored outside & unprotected from the UV rays & inclement weather will be safe to handle.

Don't choose FIBCs without consulting the manufacturer or supplier.



Storage of Empty FIBCs

Whether you have just purchased new FIBCs, or used FIBCs, it is very important to take great care in storing them properly until you are ready to fill them with product.

IMPORTANT NOTE!

Shelf-Life of FIBC's

As of this present date, the FIBCA is not aware of, nor has it ever been presented with any data, test reports, or studies determining the shelf life of a FIBC. Any recommendations in regards to the shelf life of a FIBC, are solely the responsibility of each company making such declarations.

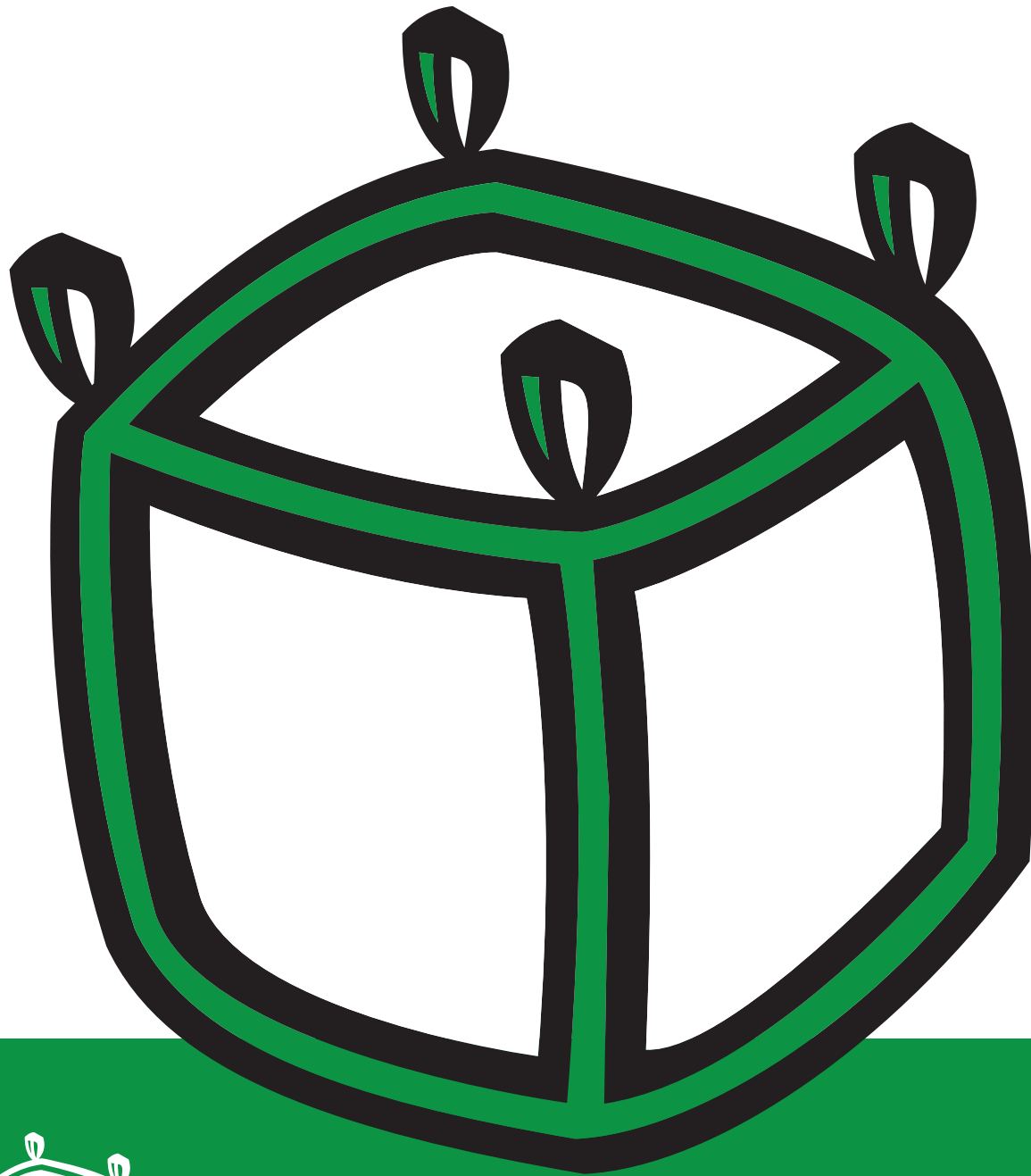
The Flexible Intermediate Bulk Container Association does not endorse any typical shelf life for a FIBC/Bulk Bag. Variables such as UV inhibitor used, construction (fabric weight, thread, webbing, etc.), exposure to environmental hazards (UV, temperature and humidity), storage methods, handling methods and the contents of the FIBC can dramatically impact the shelf life of a FIBC.

The best method for determining if a FIBC remains suitable for use is to conduct periodic performance testing (top lift, UV, etc.) on samples and compare the results to the results from the newly manufactured samples from same lot. Samples should continue to meet industry standards such as those set forth in ISO 21898.



FIBC Handling Guidelines

Part 2: Filling of FIBCs



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Filling of FIBCs

To successfully and safely fill FIBCs, it is important to review the suggested guidelines below, along with any other safe filling guidelines specific to your product and facility.

WHEN FILLING A FIBC ALWAYS ENSURE THAT...

The FIBC is free from any damage that would compromise its strength.

The bottom discharge chute is closed correctly (prior to filling the FIBC). Closed correctly means according to the FIBC manufacturer's instructions.

The product going into the FIBC is compatible with the FIBC and all its components.

The FIBC is filled evenly.

The filled FIBC remains stable.

The rated capacity of any device used to suspend or support a filled FIBC is of sufficient strength capacity.

A FIBC is suspended per the manufacturer's instructions and using all lift loops, sleeves, etc provided.

All lift loops or sleeves are vertical to prevent damaging lateral forces.

The crane hooks, bars or fork-lift tines used for lifting are free from sharp edges or protrusions. Crane hooks, bars or fork-lift tines must be of adequate size with edges rounded to at least the thickness of the lift loops, sleeves, etc. used to support the FIBC. The radius must be a minimum of 5 mm.

The Fill Spout of a FIBC is closed in accordance with the FIBC manufacturer's instructions.

A FIBC is raised and lowered smoothly.

You adhere to the FIBC manufacturer's recommendations and any instructions printed on the label or FIBC.

The FIBC is approved for the product (i.e. dangerous goods / Hazardous materials).

The FIBC is appropriate for the filling environment (i.e. electrostatic concerns in flammable or explosive environments).

You take appropriate measures with regard to dust control.

All personnel are safely clear of any potential hazards.

A filled FIBC adheres to all applicable regulatory and safety requirements.



Filling of FIBCs

To successfully and safely fill FIBCs, it is important to review the suggested guidelines below, along with any other safe filling guidelines specific to your product and facility.

WARNING

WHEN FILLING A FIBC NEVER...

Never fill a FIBC with a product which is incompatible with the FIBC or its components.

Never fill a FIBC without verifying that the bottom spout is closed correctly.

Never fill a FIBC to a level that adversely affects its stability and/or exceeds the height to width limitations set forth in applicable industry standards or regulatory codes. A maximum ratio of 2:1 is typical however current industry standards or regulatory codes should be referenced.

Never exceed the safe working load (SWL) / rated capacity specified for a FIBC.

Never support a FIBC with a device not designed for FIBCs.

Never suspend a FIBC using a hook that does not have an approved safety latch.

Never suspend a FIBC using fewer lift loops, sleeves, etc than have been provided.

Never subject a FIBC to sudden lifts or sudden stops.

Never lift a FIBC if the lift loops, sleeves, etc are not vertical.

Never fill a FIBC with a product unless you're sure it is approved for that product (i.e. dangerous goods / hazardous materials).

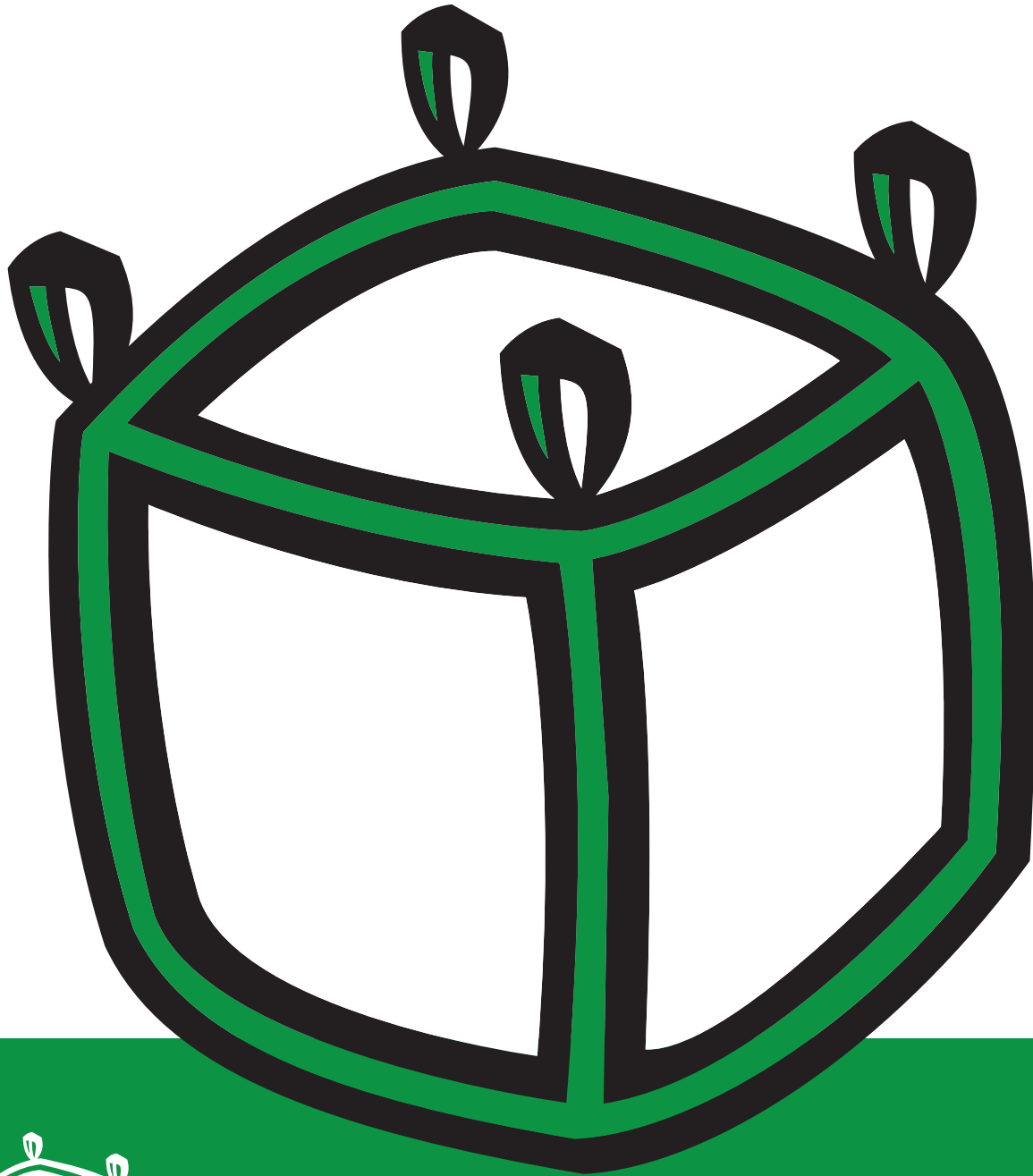
Never fill a FIBC unless it is appropriate for the filling environment (i.e. electrostatic concerns in flammable or explosive environments).

Never allow personnel to place an arm or other appendage under a suspended FIBC. Never allow personnel under a suspended FIBC.



FIBC Handling Guidelines

Part 3: Handling FIBCs with Cranes or Hoists



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Handling FIBCs with Cranes or Hoists

When handling FIBCs with cranes or hoists, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

WHEN USING A CRANE OR HOIST ALWAYS ENSURE...

The FIBC is free from any damage that would compromise its strength

You use a crane or hoist with a rated capacity sufficient to support the filled FIBC.

The crane hooks, bars or fork-lift tines used for lifting are free from sharp edges or protrusions. Crane hooks, bars or fork-lift tines must be of adequate size with edges rounded to at least the thickness of the lift loops, sleeves, etc. used to support the FIBC. The radius must be a minimum of 5 mm.

Any devices used to handle FIBCs are designed for FIBCs and adhere to approved handling methods.

All lift loops or sleeves are vertical to prevent damaging lateral forces.

A FIBC is suspended per the manufacturer's instructions and using all lift loops, sleeves, etc provided.

The rated capacity of any device used to suspend or support a filled FIBC is of sufficient strength capacity.

A FIBC is raised and lowered smoothly.

Always ensure you have a clear line of site before moving a FIBC.

All personnel are safely clear of any potential hazards.

You adhere to the FIBC manufacturer's recommendations and any instructions printed on the label or FIBC.

You adhere to all applicable regulatory and safety requirements.



Handling FIBCs with Cranes or Hoists

When handling FIBCs with cranes or hoists, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

WARNING

WHEN USING A CRANE OR HOIST

Never handle a damaged FIBC.

Never exceed the rated lifting capacity of the crane or hoist.

Never handle FIBCs with a device not designed for FIBCs.

Never lift a FIBC if the lift loops, sleeves, etc. are not vertical.

Never gather loops to lift with one hook, unless the FIBC is specifically designed and approved by the manufacturer for that specific use.

Never suspend a FIBC using fewer lift loops, sleeves, etc than have been provided.

Never subject a FIBC to sudden lifts or sudden stops.

Never move the FIBC if your line of sight is blocked.

Never allow personnel under a suspended FIBC.

Never allow personnel to place an arm or other appendage under a suspended FIBC.

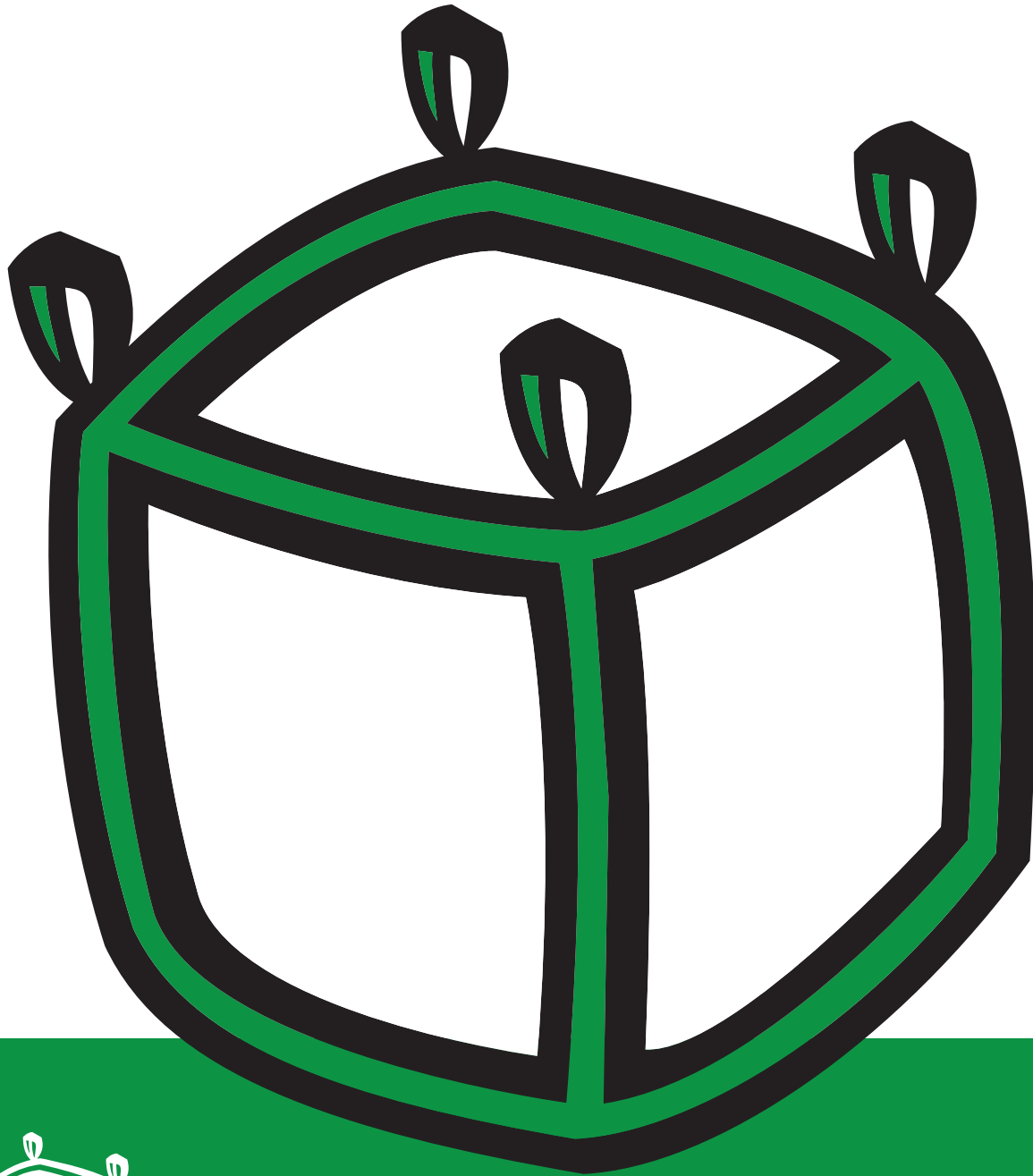
Never handle a FIBC in a manner not specifically approved by the FIBC manufacturer.

Never deviate from applicable regulatory and safety requirements.



FIBC Handling Guidelines

Part 4: Handling FIBCs with Fork-Lift Trucks



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Handling FIBCs with Fork-Lift Trucks

When handling FIBCs with fork-lift trucks, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

WHEN USING A FORK-LIFT TRUCK ALWAYS ENSURE...

The FIBC is free from any damage that would compromise its strength.

You use a fork-lift truck with a rated capacity sufficient to support the filled FIBC.

The fork-lift tines used for lifting are free from sharp edges or protrusions. Tines must be of adequate size with edges rounded to at least the thickness of the lift loops, sleeves, etc. used to support the FIBC. The radius must be a minimum of 5 mm.

The distance between the fork-lift tines is adjusted to the correct width for the FIBC being handled.

Any devices used to handle FIBCs are designed for FIBCs and adhere to approved handling methods.

All lift loops or sleeves are vertical to prevent damaging lateral forces.

A FIBC is suspended per the manufacturer's instructions and using all lift loops, sleeves, etc provided.

A FIBC is raised and lowered smoothly.

You hold the FIBC close to the mast, as low as possible with the mast tilted back to an appropriate angle.

The FIBC is clear of the floor and not in contact with the wheels of the fork-lift.

That any pallets used for handling are of appropriate size and the FIBC does not overhang the side.

That you have a clear line of site before moving a FIBC with a fork truck.

Stop the fork-lift before raising or lowering the FIBC.

All personnel are clear of the area before lifting or handling a FIBC.

You adhere to the FIBC manufacturer's recommendations and any information printed on the label or FIBC.

You adhere to all applicable regulatory and safety requirements.



Handling FIBCs with Fork-Lift Trucks

When handling FIBCs with fork-lift trucks, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

IMPORTANT NOTE!

It is a violation of U.S. Federal law for anyone UNDER 18 years of age to operate a forklift or for anyone OVER 18 years of age who is not properly trained and certified to do so.

Visit the Occupational Safety & Health Administration website at www.osha.gov for details.

WARNING

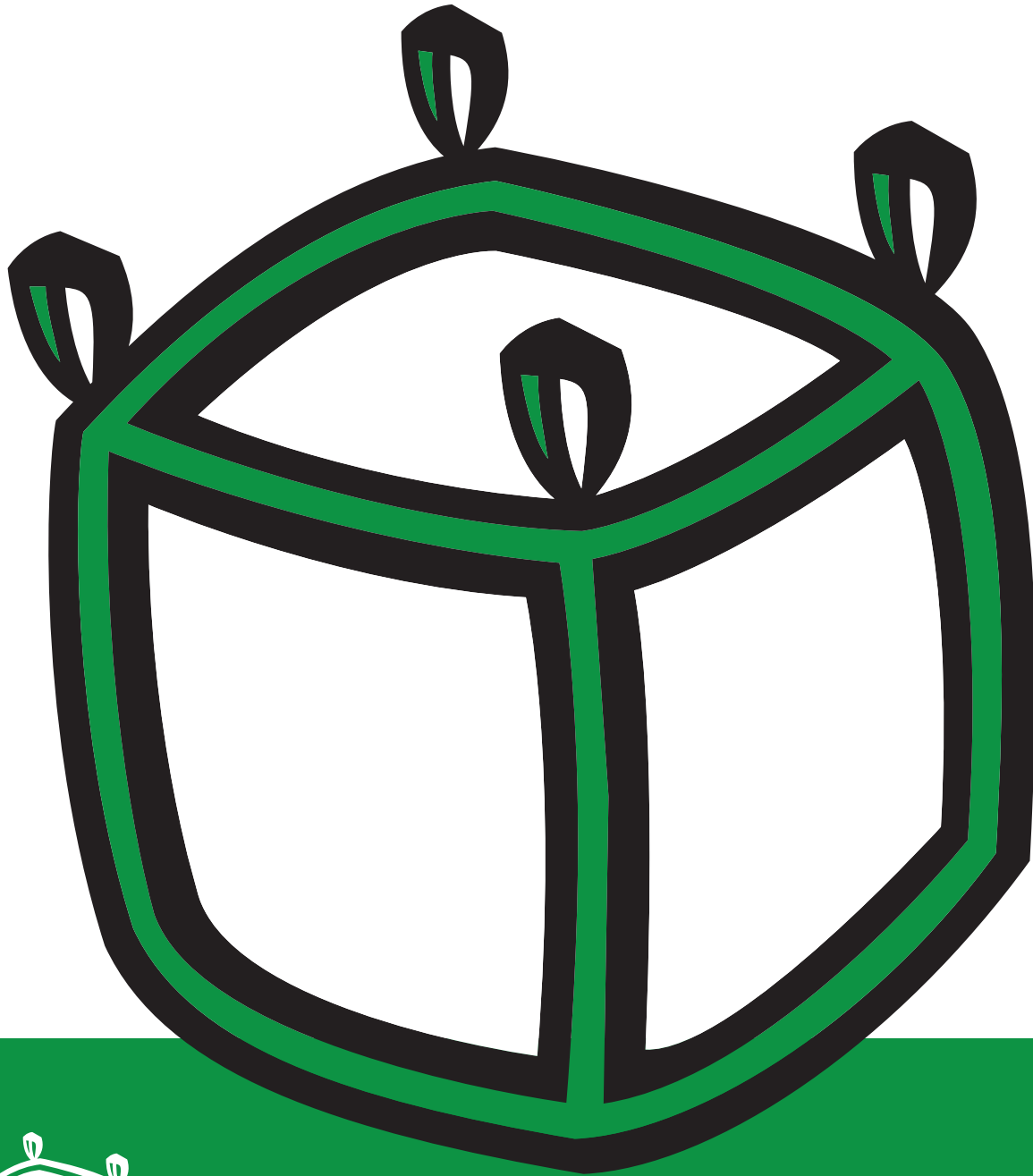
WHEN USING A FORK-LIFT TRUCK

- Never exceed the rated lifting capacity of the fork-lift truck.
- Never handle FIBCs with a device not designed for FIBCs.
- Never lift a FIBC if the lift loops, sleeves, etc. are not vertical.
- Never suspend a FIBC using fewer lift loops, sleeves, etc than have been provided.
- Never subject a FIBC to sudden lifts or sudden stops.
- Never tilt the mast of a fork-lift truck forward when handling a FIBC.
- Never move the FIBC if your line of sight is blocked.
- Never drag, push or move a FIBC by the lift loops when the FIBC is touching the ground.
- Never allow the FIBC to come in contact with the wheels or body of the fork-lift truck.
- Never withdraw the fork-lift tines without removing all of the load from the loops or sleeves.
- Never raise or lower the FIBC when the fork-lift truck is in motion.
- Never allow personnel under a suspended FIBC.
- Never allow personnel to place an arm or other appendage under a suspended FIBC.
- Never handle a FIBC in a manner not specifically approved by the FIBC manufacturer.



FIBC Handling Guidelines

Part 5: Storage and Transportation of Filled FIBCs



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Storage and Transportation of Filled FIBCs

When storing and transporting filled FIBCs, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

WHEN STORING & TRANSPORTING FILLED FIBCS ENSURE...

The FIBC is free from any damage that would compromise its strength.

That all FIBCs are stable when stacking.

That FIBCs are stacked using a “Pyramid” or “Supported” stacking method:

- » *Pyramid Stacking: Each bag above the first layer must sit on at least four lower bags. Each layer is subsequently tiered inwards forming a pyramid structure.*
- » *Supported Stacking: Formed against two retaining walls of sufficient strength.*

That any pallets used for storage are of appropriate size and the FIBC does not overhang the side, unless the FIBC is specifically designed and approved by the manufacturer for this specific use.

You avoid subjecting a FIBC to sudden lifts or sudden stops during transportation.

All FIBCs are adequately secured during transportation.

You adhere to the FIBC manufacturer’s recommendations and any information printed on the label or FIBC.

You adhere to all applicable regulatory and safety requirements.

FIBCs are stored in a safe, clean facility or warehouse which will protect them from the UV rays of sunlight and the moisture of inclement weather.

FIBCs are covered that would be exposed to dirt, dust or moisture inside a facility or warehouse.



Storage and Transportation of Filled FIBCs

When storing and transporting filled FIBCs, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

WARNING

WHEN STORING & TRANSPORTING FILLED FIBCS

Never stack FIBCs unless you're sure of their stability.

Never approach or repair a damaged bag without first removing all bags stacked on top.

Never allow a FIBC to overhang the side of a pallet unless the FIBC is specifically designed and approved by the manufacturer to do so.

Never subject a FIBC to sudden lifts or sudden stops during transportation.

Never transport a FIBC without it adequately secured during transportation.

Never handle a FIBC in a manner not specifically approved by the FIBC manufacturer.

Never deviate from applicable regulatory and safety requirements.

Beware of Sunlight & UV Rays:

- » *Always protect your FIBCs from sunlight and the harmful effects of UV rays.*
- » *Over time, exposure to UV rays will weaken the strength of a FIBC.*

Beware of Inclement Weather (rain, snow, etc.)

- » *Always protect your FIBCs from inclement weather (rain, snow, etc.)*
- » *Over time, exposure to inclement weather could significantly weaken the strength of a FIBC.*

Beware of Water or Moisture Contamination Inside Storage Facilities.

- » *Always try to store your empty FIBCs inside a covered facility or warehouse that is free from any water or moisture contamination that could come into contact with your FIBCs and damage them.*

Outside Storage is Not Recommended.

- » *Storing empty FIBCs outside is not recommended, but if you do, you should always cover them with some type of material that will prevent their exposure to UV rays and inclement weather. However, FIBCA does not support or endorse this type of outdoor storage, and this would be solely at your own risk. There is no guarantee that FIBCs stored outside & unprotected from the UV rays & inclement weather will be safe to handle.*



Storage and Transportation of Filled FIBCs

When storing and transporting filled FIBCs, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

IMPORTANT NOTE!

Shelf-Life of FIBC's

As of this present date, the FIBCA is not aware of, nor has it ever been presented with any data, test reports, or studies determining the shelf life of a FIBC. Any recommendations in regards to the shelf life of a FIBC, are solely the responsibility of each company making such declarations.

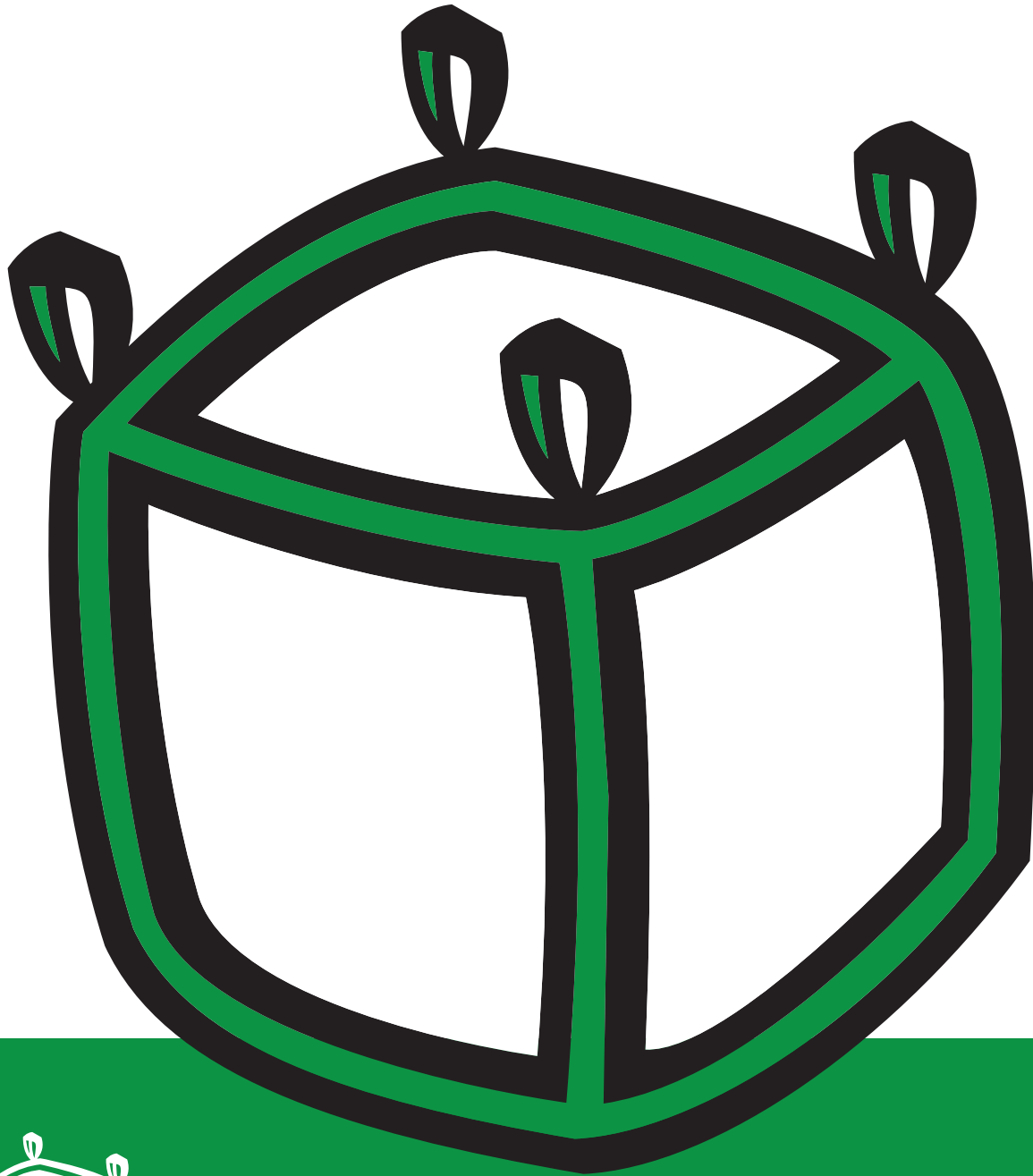
The Flexible Intermediate Bulk Container Association does not endorse any typical shelf life for a FIBC/Bulk Bag. Variables such as UV inhibitor used, construction (fabric weight, thread, webbing, etc.), exposure to environmental hazards (UV, temperature and humidity), storage methods, handling methods and the contents of the FIBC can dramatically impact the shelf life of a FIBC.

The best method for determining if a FIBC remains suitable for use is to conduct periodic performance testing (top lift, UV, etc.) on samples and compare the results to the results from the newly manufactured samples from same lot. Samples should continue to meet industry standards such as those set forth in ISO 21898.



FIBC Handling Guidelines

Part 6: Emptying/Discharging FIBCs



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Container Association

Emptying/Discharging FIBCs

When emptying / discharging FIBCs, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

WHEN EMPTYING/DISCHARGING FIBCS ENSURE THAT...

The FIBC is free from any damage that would compromise its strength.

The FIBC is appropriate for the discharging environment (i.e. electrostatic concerns in flammable or explosive environments).

Any devices used to handle FIBCs are designed for FIBCs and adhere to approved handling methods.

The rated capacity of any device used to suspend or support a filled FIBC is of sufficient strength capacity.

The crane hooks, bars or fork-lift tines used for lifting are free from sharp edges or protrusions. Crane hooks, bars or fork-lift tines must be of adequate size with edges rounded to at least the thickness of the lift loops, sleeves, etc. used to support the FIBC. The radius must be a minimum of 5 mm.

A FIBC is raised and lowered smoothly.

All lift loops or sleeves are vertical to prevent damaging lateral forces.

A FIBC is suspended per the manufacturer's instructions and using all lift loops, sleeves, etc provided.

All personnel are safely clear of any potential hazards.

Take appropriate measures with regard to dust control.

You adhere to the FIBC manufacturer's recommendations and any information printed on the label or FIBC.

You adhere to all applicable regulatory and safety requirements.



Emptying/Discharging FIBCs

When emptying / discharging FIBCs, it is important to review the suggested guidelines below, along with any other safe handling guidelines specific to your product and facility.

WARNING

WHEN EMPTYING/DISCHARGING FIBCS

Never handle a damaged FIBC without consulting your FIBC manufacturer first.

Never empty a FIBC unless it is appropriate for the filling environment (i.e. electrostatic concerns in flammable or explosive environments).

Never support a FIBC with a device not designed for FIBCs.

Never subject a FIBC to sudden lifts or sudden stops.

Never suspend a FIBC using a hook that does not have an approved safety latch.

Never gather loops to lift with one hook, unless the FIBC is specifically designed and approved by the manufacturer for this specific use.

Never suspend a FIBC using fewer lift loops, sleeves, etc than have been provided.

Never allow personnel under a suspended FIBC.

Never allow personnel to place an arm or other appendage under a suspended FIBC.

Never lift a FIBC if the lift loops, sleeves, etc. are not vertical.

Never gather loops to lift with one hook.

Never handle a FIBC in a manner not specifically approved by the FIBC manufacturer.

Never deviate from applicable regulatory and safety requirements.



FIBC Handling Guidelines

LEGAL NOTICE

Attached are generic FIBC handling guidelines that could be used as a reference in various situations. By accessing and/or using some portion or all of these handling guidelines, users (“User(s)”) agree to be legally bound and to abide by the terms set forth below.

Any use of these guidelines is at the Users’ own risk. FIBCA does not warrant the accuracy or timeliness of the handling guidelines, nor does it warrant that the handling guidelines comply with all governing laws or regulations. FIBCA has no liability for any errors or omissions in the handling guidelines, whether provided by FIBCA or third parties. FIBCA does not warrant that the handling guidelines are reasonably appropriate for any particular circumstance and there may be circumstances where different or additional warnings and/or handling guidelines are required.

IT IS THE RESPONSIBILITY OF EACH INDIVIDUAL COMPANY TO ENSURE THAT THEIR HANDLING GUIDELINES ARE REASONABLY APPROPRIATE UNDER THE CIRCUMSTANCES AND COMPLIES WITH THE LAW. FIBCA ASSUMES NO RESPONSIBILITY IN THAT REGARD.

THESE HANDLING GUIDELINES ARE PROVIDED TO YOU ON AN “AS IS” AND “WHERE-IS” BASIS, WITHOUT ANY WARRANTY. FIBCA, FOR ITSELF AND ANY THIRD PARTY PROVIDING SERVICES OR CONTENT IN CONNECTION WITH THE HANDLING GUIDELINES, MAKE NO REPRESENTATIONS OR WARRANTIES IN CONNECTION WITH THE HANDLING GUIDELINES INCLUDING BUT NOT LIMITED TO THE QUALITY, SUITABILITY, TRUTH, ACCURACY OR COMPLETENESS OF ANY INFORMATION CONTAINED IN THE HANDLING GUIDELINES. ALL CONDITIONS, REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY RIGHTS, ARE HEREBY DISCLAIMED. FIBCA WILL NOT BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO, DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, ARISING FROM OR CONNECTED WITH THE HANDLING GUIDELINES, INCLUDING BUT NOT LIMITED TO, YOUR USE OF THIS HANDLING GUIDELINES OR YOUR INABILITY TO USE THE HANDLING GUIDELINES, EVEN IF FIBCA HAS PREVIOUSLY BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

