Bulk Bags

Safe Handling Guide



Safety

As Australia's leading Specialty Fertiliser importer, Campbells Fertilisers Australasia is committed to grower and customer safety. To ensure safe handling practices, all parts of the Supply Chain have specific challenges based around unloading, storage and warehousing, loading and transport. This Guide is designed to assist you with decisions around safe handling practices.

BulK Bag or FIBC handling

FIBC's (Flexible Intermediate Bulk Containers), commonly referred to as Bulk bags, are generally strong and made of resilient material, but appropriate safety measures should be taken to ensure safety when handling bulk bags. Bulk bags are commonly available in varying sizes from 500 to 1200kg's, with 4 loop and single loop configurations available. (Other Suppliers may also be supplied in much smaller 200 - 300kg bags occasionally).

The majority of Bulk Bags currently in the fertiliser market are Single Trip bags. All Campbells Fertilisers products are supplied in one way or Single Trip bags, and are non-returnable and non-reusable.

Risk Factors

Risk factors may include:

- UV Damage from bag exposure to excessive sunlight
- Physical damage to Bulk Bag body, such as rips and tears or cuts
- · Physical damage to straps from damaged forklift or tractor fork tines
- Incorrect loading and/or unloading practices
- Incorrect storage practices
- · Unsuitable equipment for handling bulk bags, including non-compliant or under-load rated lifting equipment
- · Incorrect lifting and carrying techniques, including travelling with Bulk bag over uneven surfaces

DO

- Inspect for Bulk Bag for damage before handling, closing top correctly after inspection
- Check Label, and bags SWL (Safe Working Limit)
- Check discharge arrangements are properly secured before filling
- Ensure Bulk Bags are stable, especially when stacked
- Use suitable certified lifting gear of sufficient capacity to take the suspended load (Relative to bag weight)
- · Adjust fork tines to the correct width of the Bulk Bag
- Check fork tines or lifting equipment is free of sharp edges and any damage that may score the strap
- · Tilt the forklift mast backwards to an appropriate angle
- Ensure Bulk bags are adequately secured when transporting
- If using on farm lifting equipment, travel slowly, avoiding excessive bag movement
- Ensure crane hooks are adequately sized and rounded
- · Take appropriate measures for dust control
- Consider the possibility of static electricity hazards
- Protect Bulk bags from rain and/or prolonged sunlight

DO NOT

- Exceed the bag SWL under any circumstances
- Fill Bulk Bags unevenly
- Stop or start suddenly during transportation
- Subject Bulk Bags to snatch lifts or jerk stops
- Drag or drop Bulk Bags
- Allow personnel under a suspended Bulk Bag
- Use sharp or jagged fork tines
- Allow Bulk Bag to project over the side of a vehicle
- · Tilt the mast of the forklift forwards
- Allow Bulk bags to impact the forklift mast, or bounce repeatedly whilst travelling over uneven surfaces. This causes the load to exceed the Safe Working Limit, and may result in strap breakages, bag splitting or both (Straps MUST be used for lifting only, not transport)
- Subject the Bulk bags to snatch lifts or jerk stops
- Withdraw fork tines before relieving the load on a lifting device
- · Use or transport damaged Bulk Bags
- Attempt to repair any Bulk Bag while under load

Reference documents

For further specific information on safe use of Forklifts:

- Australia <u>www.safeworkaustralia.gov.au/</u>
- New Zealand <u>www.worksafe.govt.nz/</u>

For information around safe use of attachments on tractors (such as tractor forks), refer to your relevant Worksafe website.

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Never suspend a Bulk Bag on fewer lift loops than have been provided

Risk - Uneven load will be placed on straps, and SWL will be exceeded Potential Outcome - Bag failure Mitigation - Check straps before lifting or consider bag lifting jib to lock in all straps

Ensure lifting tines are spaced correctly

Risk - Uncorrect spacing will exert excessive lateral force when lifting Potential Outcome - Bag failure Mitigation - Match tine spacing to width of the Bulk bag straps, or consider bag lifting jib

Do not travel with lift tines tilted forward, ensure forklift mast is tilted to the rear

Risk - Bag may move forward in transit, creating uneven load Potential Outcome - Bag failure Mitigation - Ensure forklift mast is tilted to the rear any time forklift is moving in any direction

Do not stand immediately under the Bulk Bag when untying the bag chute

Risk - Exposing staff to potential danger Potential Outcome - Risk of injury or death Mitigation - Utilise or consider a bulk bag frame or bag hook to protect personal safety

Ensure Bulk Bags are correctly & securely stacked

Risk - Excess height, weight, or poor stacking adds stress to the stacked bulk bags

Potential Outcome - Bulk bag stack can fail, offering a risk to personal safety and loss of product

Mitigation - Utilise a Pyramid stacking method, avoiding exceeding recommended stack height (usually 2 layers)

Keep personnel clear of any potential hazards from suspended Bulk Bags

Risk - Exposure to personal risk of injury

Potential Outcome - Risk of injury or death

Mitigation - Consider lifting equipment or suitable frames (Certified to Aust. Standards)

Avoid fork tines with square or rough edges

Risk - Damaged tines or square edges can add risk of damaging the bulk bag straps Potential Outcome - Strap failure Mitigation - Edges must be rounded to at least the thickness of the Bulk Bags lift loops

Never gather loops to lift with one hook, unless bag is specifically designed to do so

Risk - Strap failure, each loop must have weight evenly distributed Potential Outcome - Exceeding the SWL (Safe Working Limit) causing strap or bag failure Mitigation - Consider bag lifting frame

Transport

After arriving in shipping containers, it is common practice for bulk bags to be distributed by utilities, trailers, trucks or rail. Ensure the bags are secured by correct restraint techniques, appropriate number of straps and correct rated straps. For more information, please refer to the National Transport Commission website (www.ntc.gov.au) for more information about bulk bag restraint.