

# **AFIBCA**

## **CODE OF PRACTICE FOR SUPPLY & USE OF FIBCs - PART 1**

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### **1. FOREWORD**

This AFIBCA Code of Practice has been prepared by the Council of the AFIBCA and deals with guidance to users on the selection and use of FIBCs.

### **2. SCOPE**

Instructions for handling in accordance with this code are intended to provide certain guidelines for dimensioning, filling, transporting, storing, emptying, repairing and reusing FIBCs.

### **3. REFERENCES**

- ISO 21898:2004, Packaging --- Flexible Intermediate Bulk Containers (FIBCs) for Non-Dangerous goods.
- British Standard BS 1898:2001
- Australian Standard AS 3668 - 1989.
- Transport of Dangerous Goods by road and rail;
  - **Australian Code for the Transport of Dangerous Goods by Road and Rail** (ADG Code) and their relevant regulations.
- Transport of Dangerous Goods by sea;
  - **International Maritime Dangerous Goods Code** (IMDG Code) and their relevant regulations.

NB: The **ADG Code** and the **IMDG Code** are based on **Recommendations for the Transport of Dangerous Goods** as published by the United Nations.

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### **4. GENERAL PROPERTIES**

#### **Storage of Filled FIBCs**

Some FIBCs are suitable for outdoor storage, others are not. It is most important that the manufacturer's or his agent's recommendations are followed to obtain the maximum life and performance from the containers, and to avoid damage to the contents.

In addition to the above, it is most important that stocks of FIBCs are rotated on a regular basis in order to avoid damage or deterioration, which may ensue from long term storage in the one position.

It is recommended that where FIBCs are stored out of doors:

- (a) particular attention should be paid to the top closure and its method of tying off
- (b) they should be sheeted over to prevent excessive water collection on the top of the FIBC
- (c) they should be protected from direct sunlight
- (d) care should be taken to ensure that the FIBCs are not standing in water
- (e) care should be taken to avoid high temperatures.

#### **Temperature**

FIBCs should not be filled with goods at, or which give rise to, high temperatures.

FIBCs should not be handled at extremely low temperatures, lest they have become temporarily embrittled.

#### **Chemicals**

FIBCs for dangerous goods shall meet the special requirements that the relevant authorities make for such goods.

FIBCs that are not intended for dangerous goods may not be used for transporting such goods.

FIBCs may not be used for goods that damage the FIBC materials.

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### **5. TRANSPORT**

#### **5.1 General**

During transportation FIBCs should be protected as outlined in Sections 4 above.

#### **5.2 Truck Transport**

Transport by means of truck and the like generally provides possibilities for utilising the advantages of top-handling FIBCs when loading and unloading.

#### **5.3 Railway Transport**

Open or closed railway wagons with openable sides or roof can be used.

#### **5.4 Ship Transport**

FIBCs can be combined to form large unit loads on platforms or in containers. When transporting FIBCs that do not form unit loads, it is an advantage to be able to load and unload several FIBCs in each lift. The ship's hold should preferably be designed so that loading and unloading can be carried out vertically everywhere. If FIBCs are stacked in a ship's hold, their compression performance should be assessed.

### **6. STACKING**

6.1 Where available AFIBCA supports the use of pallet racking or other suitable racking for storage of FIBC's

6.2 Portable storage frames can be unstable and are not recommended

6.3 For bags which are "free stacked" (no external or additional support) FIBC's should not be stacked directly on top of each other (direct stacking), rather they should be staggered like the building of a pyramid. Using this method bags can be stacked 5 high as per the testing requirements of the Australian Standard (AS-3668-1989)

6.4 For bags stacked "supported" (leaning against 1 or more supporting structures) direct stacking is to be discouraged, but could be done to 3 bags high should suitable care be taken in their placement. For supported stacks AFIBCA would encourage staggered stacking and see no reason this could not be done to 5 bags high as per the testing requirements of the Australian Standard (AS-3668-1989)

6.5 In stacks over 2 bags high the use of pallets between the bags should be discouraged. Bags would therefore be lifted by the lifting loops for placing into position.

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**7 RECOMMENDATIONS FOR SELECTION AND USE**

- (a) When selecting FIBCs, the requirements for use should be discussed with the manufacturer or his agent.

Never use FIBCs under changed conditions, or for new applications, without careful consideration of all possible implications.

- (b) FIBCs must always be filled, lifted and emptied in accordance with the manufacturer's instructions.
- (c) FIBCs, both single-trip and multi-trip, are designed to be lifted from above via the lifting points provided. Both single-trip and multi-trip bags are designed and tested to be lifted numerous times after being filled and until they are discharged. Single-trip bags can only be filled and discharged once, whilst multi-trip bags can be filled and discharged several times.
- (d) Fork lift tines or hooks used in lifting FIBCs must not have sharp edges which may cause damage to the lifting devices of the bags.
- (e) Forklift trucks or the equivalent must have sufficient capacity for the suspended load.
- Abrupt stops and starts must be avoided. The space between the forklift tines shall be adapted to the lifting devices of the FIBCs. The forklift truck mast shall be tilted backwards, so that the FIBC is securely suspended during transport.
- (f) Care should be taken to avoid fire or explosion hazards, which can occur with some products due to static electricity.
- (g) FIBCs must not be dragged.
- (h) FIBCs should not be permitted to project over the side of pallets. Damaged pallets, eg: pallets having protruding nails or splinters, should not be used.
- (i) FIBCs must not be permitted to project over the sides of vehicles. Care must be taken to avoid damage or abrasion that can be caused by vehicle side-gates.
- (j) Personnel must not be permitted to walk or stand under suspended FIBCs.
- (k) Each company that fills an FIBC is responsible for inspecting each bag before and after the filling operation. Each company that handles an FIBC is responsible for inspecting each bag before each lift.

Check that the FIBC is undamaged before it leaves your premises and/or prior to lifting the FIBC.

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**RECOMMENDATIONS FOR SELECTION AND USE (cont'd)**

- (l) Damaged FIBCs should be removed from service. Before undertaking any repairs, the manufacturer or his agent should be consulted.
- (m) The resale of multi-trip FIBCs after use should be viewed with extreme caution, since the FIBCs may be used for loads and in conditions for which they were not originally intended by the manufacturer. This can lead to mishandling and give rise to dangerous situations.
- (n) When reusing multi-trip FIBCs, care should be taken to avoid product contamination arising from previous usage.
- (o) **The sale, repair or reuse of used single-trip FIBCs is dangerous and should not be practised.**

**The sale or repair of used single-trip FIBCs by AFIBCA members is prohibited by the Association.**