

# Flexible PVC Liners for Hermetic or Modified Atmosphere Storage of Stacked Commodities

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Flexible PVC liners have been developed to completely envelop stacks of bagged grain or other durable food commodities, so as to enable outdoor storage to be carried out in situations where no storage structures are available. They are weather resistant, waterproof, have low permeability to gases, are resistant to rodent penetration, and are made in various sizes to hold from 5 to 50 tonnes of grain. They have no rigid structural parts and can be quickly and easily erected or dismantled.

Two versions of these liners have been developed:

- **Storage cubes for hermetic storage**

These provide farmers with appropriate storage technology for protecting grain from insects and rodents for prolonged periods without need for chemical treatments.

They also provide storage facilities in disaster situations when food is transported to areas where no warehouses exist, or where blockages in the food pipeline necessitate emergency storage.

- **Small scale modified atmosphere (MA) treatments**

These are storage cubes equipped with inlet and outlet ports to enable application of MAs or conventional fumigants by gravity displacement.

Potential applications are:

- insect control in organically grown commodities
- insect disinfestation of dried fruits
- wax moth control in honey combs.

Advantages of these liners for MA treatments are simplicity and efficiency of application with no head-space and no need for pressure release valves. They can also be used for prolonged storage after treatment to prevent reinfestation of the commodities.