## **SECURING THE CARTON**

Closing of the carton must be secure enough to withstand transport and handling activities. There are four ways in which a carton can be closed, these are;

- Adhesive
- · Stitching or Stapling, or

Tape

Strapping

## **Comparative Securing Systems**

Closure System	Material	Dust Proof	Quick Sealing	Cost	Sensitive to Humidity	Adhesion to All Surfaces
Adhesive	Cold Glue	No	No	Low	Yes	No
	Hot Glue	No	Yes	High	No	Yes
Таре	Gummed kraft	Yes	Yes	Low	Yes	No
	Reinforced Gummed kraft	Yes	Yes	Med	Yes	No
	Pressure sensitive	Yes	Yes	High	No	Yes
Stitching or Stapling	Metal	No	Yes	High	No	Yes
Strapping	Metal	No	Yes	Med	No	Yes
	Plastic	No	Yes	Low	No	Yes

Note that tape is only dust proof if all edges are sealed. Reinforced Kraft and Pressure Sensitive tapes are strong enough to permit only a single tape, top and bottom, to close the box, but the box is not then dust proof.

If using glue, cold glues must cover at least 50% of the flaps. Hot melts require at least 25% coverage, usually in eight strips per flap. Hot melt glues may not be environmentally acceptable, but cold glues may be acceptable.

## Tapes for Carton Closure

Although gluing a carton is the most secure method of closing the flaps and ensuring safe delivery, speed of packaging and flexibility may require tapes.

When choosing a tape for a particular shipment consider the following:

- 1. Surface to which tape is to be adhered. The tape must stick under all anticipated conditions of handling and transportation.
- 2. **Removability.** Tape must be removable without disturbing the product in the box.