

# Plastics

### Plastics Pallets, Packaging & Climate Change

Plastic pallets are made from oil, an expensive fossil fuel that is increasingly scarce and non-renewable.

Manufacture of plastic pallets generates CO<sup>2</sup> emissions – compare this with timber, which actually absorbs CO<sup>2</sup> from the atmosphere



## Re-usable, Repairable & Recyclable?

Plastic pallets are reusable; but they are not repairable, as they are made from a mould. The plastic pallet is a single piece, which, if any part is damaged, must be replaced entirely.

Recycling plastics is not cost-effective; it costs far more to recycle a piece of plastic than it is to create a new identical piece.

Plastic pallets and packaging are also extremely slow to degrade, as they are effectively non-biodegradable.



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### Plastics: An Unknown Quantity

Some of the unanswered questions about plastic pallets:

- In the US, harmful deca-bromine has been widely used in plastic pallets and other rigid plastic products as a flame retardant. It is still being used?
- If deca-bromine is no longer being used as a fire retardant in plastic pallets, what is being used in its place? Is it any safer?



- Wood burns slowly and predictably. By contrast, a fire fuelled by plastic burns unpredictably, and as a result is more difficult to fight. If no fire retardant is being used in plastic packaging, isn't it a fire hazard?
- Cadmium has been used as a chemical stabiliser in plastic products but is now being withdrawn due to health and environmental concerns. There is currently legislation in place that allows plastic pallets, crates and other packaging to be used until a review in 2013. How many of these pallets will remain in circulation and how many contain this hazardous material?
- Plastic surfaces have been found to form biofilms, which harbour bacteria. How much of an issue is this with plastic pallets?
- What is the environmental impact of manufacturing pallets and packaging from plastics, which are made from finite resources, and are problematic to depose of?
- What is the carbon footprint of plastic pallets and plastic packaging? How does this compare with the negative carbon footprint of a similar product made of wood?

## Corrugated: An Alternative?

Corrugated fibreboard is a paper-based material usually consisting of a fluted corrugated sheet and one of two flat linerboards.

### Corrugated Pallets & Packaging Disadvantages:

- Susceptible to moisture
- Lacks rigidity compared to most other pallet materials
- Dust emanations from the manufacture

