Risks & Hazard

Difference between risk and hazard:

- Chemicals used in FCM might be hazardous, but
- if you are NOT EXPOSED to that hazard, there is NO RISK.

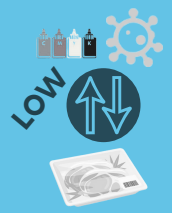
Something can be a hazard but not dangerous, so there is no risk.

Incorrect reports in the **media** about plastic packaging.

Making people feel and think it is dangerous while it is not the case at all.

Examples

Low migration of printing inks or adhesives through the plastic packaging into the contents/food.



Interaction between packaging and contents or transfer of substances/chemicals from packaging into food is a **natural process** with ALL packaging materials. It **cannot** be completely **prevented**, but it **can** be limited.

EUPC

Polymer Comply Europe

For any request, please contact
federico.gorrini@pceu.eu

The reasons of Plastics in Food Packaging

Functionality

Do I need packaging ?
If yes, what do I expect packaging to do?

Consumer & legal demands are met, **simultaneously**, rather than one at the expense of the other.
This is **relevant for packaging** in general, but even more for food and drink packaging, with the so-called **Food Contact Materials (FCM)**.

Plastics have been proven to be **able to do the trick for food preservation**: longer shelf life, fewer resources, protection against UV, moisture, odor, etc., all at the same time.

No other materials could replace and be as functional as plastics.

Safety

Plastics materials represent the **best solution** to maintain the **safety** of the food in contact with them.

Plastics are the **most regulated** packaging material available, giving assurance about their safe use.

Molds, bacteria, and viruses do not grow on plastic surfaces and do not permeate through them.
Plastic materials highly contribute to the hygienic handling and distribution of foodstuffs in complex supply chains.

Plastics materials :

- **prevent the growth of microorganisms in food** providing barrier against oxygen and moisture; some types of plastics protect from UV-light, strongly decreasing spoilage rate and loss of nutrients.
- Intrinsically inert and stable
- Do not biodegradable (with the exception of some types purposely designed to biodegrade).
- Properties of plastics are modulated & optimized through their composition

Sustainability

Plastics are **sustainable** due to their **high rate of recyclability**, helping us to achieve a circular economy for food packaging.

Plastics also help us to **reduce** the **carbon-foortpin**t due to their much **lower weight** than other materials! Thin layers are lightweight and save material.

FCMs are often used in single used applications providing:

- Packed individually
- **Content is atmosphere protected**
- Increase of the likelihood of **consuming** the food or the beverage **before the expiry date**
  - Plastic properties & material assemblies allow **seal of the packaging and atmosphere control**
- Material types and assemblies are chosen carefully to suit the requirement of **preservation,** according to the **nature of the food or beverage**