

# RECYCLED PET FOAM CORE



## WHAT IS PET?

PET, **Polyethylene Terephthalate**, is the most common thermoplastic **polymer resin** form of the **polyester family**. It is extruded or molded into plastic bottles & containers, thermoforming for manufacturing, as well as other consumer products.

## WHAT IS PET MADE FROM?

PET is a **polymer** of **ethylene glycol** and **terephthalic acid**. Pellets of PET resin are heated to a molten liquid, which can be easily extruded or molded into almost any shape.



## CAN WE USE RECYCLED PET?

**Absolutely.** PET is **recyclable** and highly **sustainable**. It can be recovered and recycled again and again back into numerous products and materials including bottles, containers, textile materials, automotive parts and construction materials. The process requires a series of special washing processes or by a chemical treatment to break down the PET into its raw materials or intermediates, which are then purified and converted into new PET resin. The recycling code/resin code for PET is #01 PET(E), which identifies the material from which an item is made.

## WHY USE RECYCLED PET?

Recycling PET products **reduces** the amount of **waste** going into **landfills** and **saves energy** and **resources**. It is a remarkably energy-efficient packaging material, with an environmental impact that compares very favorably to glass, aluminum and other materials. Although PET's feedstocks are derived from crude oil and natural gas, approximately **40%** of that energy is trapped within the PET polymer for recapture and reuse every time PET is recycled. PET is also very **strong yet lightweight**, it allows more product to be delivered with **less packaging**, **less weight** and **less fuel** for transport. These factors help explain why life cycle studies of PET have consistently shown it to be a **highly sustainable** material with a **positive environmental profile**.



## HOW DO ARMACELL USE RECYCLED PET?

Armacell is the pioneer in the field of PET technology and was the first manufacturer to succeed in qualifying PET foam as core material for the composite industry. Armacell further developed and successfully introduced PET foam cores, 100% made from post-consumer (recycled) PET materials, more precisely from **recycled beverage bottles**. Products including Armafix Ecolight, and Armafix AF, NH and Ultima pipe supports are made using PET technology.

