

MADE FROM 100% PLASTIC WASTE

Smile Plastics is one of the latest collections of our environmentally friendly plastics collection. A collection of decorative sheet material made from 100% recycled plastic waste. Plastic PET-bottles, yogurt cups, packaging materials, and cutting boards are used for these sheets.

## Important characteristics

- Each sheet is entirely made from plastic waste
- Moisture resistant
- Fully recyclable
- Easy to fabricate



# Material description

## Colour and surface

Smile Plastics consists of 6 standard types, consisting of 3 types of materials, namely polystyrene (HIPS), PET and polyethylene (HDPE). Each type is supplied with a matte structure. The sheets are pressed per sheet and can therefore vary in pattern or colour. Smile Plastics tries to press sheets without any spots or dents, but small alterations are part of the production process and are seen as 'natural feature'. It is possible that some Blue and Black Dapple sheets contain yellow spots, for example. Contact us if this can be a problem.

## Sheet size and thicknesses

The sheet material is available in 12 and 20mm in the maximum sheet size 2000x1000mm.

## Characteristics

All Smile Plastics types are stiff, completely moisture- and weather resistant. The various types are currently tested on UV-stability. All sheets of Smile Plastics are made from used plastic. This plastic waste itself is food grade, but this does not automatically make the Smile Plastics sheets food grade as well. This can be tested batch-wise to obtain a food grade certificate. There is a difference in fire certification per type of plastic material. Polystyrene is flammable material and must, therefore, be placed at a great distance from an open flame. PET is difficult to combust and therefore falls in the fire class Bs1d1 according to EN13501.

## Applications

The materials of Smile Plastics are very suitable as decorative sheet material for various applications. Bar- and counter fronts, furniture, wall cladding, retail presentations, and many more aesthetic applications. All types can be used for indoor- and outdoor applications, except the Ocean.

## Fabrications

The material can easily be fabricated with standard woodworking machinery. The fabrication possibilities differ per type of material. Each material is easy to cut, mill, drill, and sand. Smile Plastics cannot be laser-cut. The PET and polystyrene types can be easily bent and be glued. HDPE, on the other hand, is very difficult to bend and glue, this can be solved by drilling the sheets. The material can be fabricated by PyraSied, but can also be easily fabricated by interior designers, kitchen- or bathroom specialists.

## Maintenance

These sheets require little maintenance. Dirt and stains can be easily removed by using a mild detergent with warm water. The material is fairly

soft, so be careful not to use corrosive agents. The HIPS and PET sheets are sensitive to organic solvents such as acetone, paint stripper and some cleaning agents. In addition, HIPS can slightly yellow as soon as it comes into contact with bright sunlight, this effect can easily be remedied by cleaning the material with normal bathroom cleaners or sanding it lightly. Scratches on the PET and HIPS can be sanded out using appropriate grades of paper, and refinished by flame and scotch pad on HDPE. Avoid using squeegees or dry cloths on the material as they may scratch the surface. The Alba (HIPS) has metallic foil on the surface and this can become dislodged when rubbing the surface harshly or using abrasives.

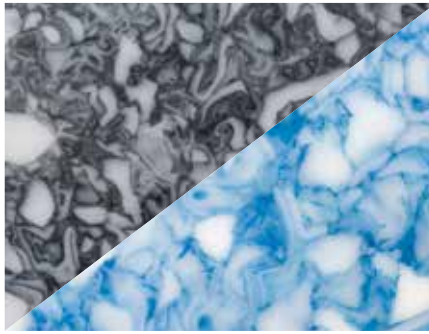


## Kaleido

- PET - polyethylene
- made from 650 to 2500 plastic bottles

Each sheet is different and the front and back of a sheet also differ from each other. A further investigation of the surface of the material yields clues about his recycling journey, whereby a number of barcodes and labels become visible. Kaleido is hard and stiff, fully moisture- and weather resistant.





**Black and Blue Dapple**

- HDPE - High Density Polyethylene
- made from 100 to 150 cutting boards

The Dapple sheets are made from cutting boards and packaging material. One sheet contains around 100 to 150 cutting boards. Since this sheet is made from HDPE, the material is not suitable for the laser and cannot be bond. This material is also difficult deformable. The Dapple sheets are ideal for table- and worktops, bar- and counter fronts and furniture.



**Alba**

- high impact polystyrene
- made from 1000 tot 5000 cups of yogurt

Alba is a white, marble-like sheet with flakes of gold and silver of the foil on yogurt cups. Alba is stiff material and therefore suitable for table tops, furniture or in constructions. The material is resistant to moisture and is UV stable. Alba is reasonably scratch resistant. Any scratches can be sanded and polished. Important: HIPS is flammable material and must, therefore, be placed at a great distance from an open flame.



**Ocean**

- PET - polyethylene
- made from 16 to 58 kg packaging material

The Ocean is the only translucent/ see-through sheet from the classic collection and is, just as Charcoal, made from used packaging. This material has the same characteristics as PET. The application field of Ocean is broad since it can also be used for lighting applications such as translucent walls and furniture.









**Charcoal**

- PET - polyethylene
- made from 16 to 58 kg packaging material

The Charcoal sheet is made from PET packaging material and is deep black with white flakes. Charcoal has the same characteristics as Kaleido, it is made from the same material. Kaleido and Charcoal are suitable as table- and worktops, bar- and counter fronts, furniture and splashbacks.

# Stock program

surface	name	design	thickness in mm					
			5	10	12	15	18	20
matte	Alba		○		●			●
matte	Kaleido		○		●			●
matte	Charcoal		○		●			●
matte	Ocean		○		●			●
matte	Black Dapple		○		●			●
matte	Blue Dapple		○		●			●



## Delivery options

PyraSied is the official Dutch distributor of Smile Plastics. We have a large stock and that is why we can supply the material quickly. Other thicknesses can be produced order-specifically and have a longer delivery time depending on the size of the project. The delivery time and prices of a special production of Smile Plastics is on request. The technical specifications per type and more information about customer-specific sheets can be requested via [sales@pyrasied.nl](mailto:sales@pyrasied.nl).

## Samples

We have samples available of the complete collection. Samples can be ordered online via our website [www.pyrasied.nl](http://www.pyrasied.nl).

## Environment

It is desirable to use these materials only for sustainable applications. PyraSied attaches great importance to people and the environment. That is why we gladly take back used sheet material for complete recycling.



**PYRASIED XTREME ACRYLIC®**