

PLASTIC MATERIAL[Home](#)**IDENTIFICATION**

For a successful weld, the filler rod should be of the same material as that being joined. Plastic material identification is not always simple and it is not possible to tell the material type from its colour. However, around half of all plastic items are made from Polyethylene. A short test weld is usually enough to tell if the filler rod is compatible with the base material.

If this is not possible, the following test will usually differentiate between the main types of plastic:-

Cut a small sliver or shaving from the material to be welded and hold it in a match or lighter flame. Compare the results as follows:-

PVC	Gives off black smoke and an acrid smell
POLYETHYLENE	No smoke is given off, the material drips like a candle and there is a smell of wax.
POLYPROPYLENE	No smoke is given off, the material drips like a candle and there is a smell of burnt oil.
POLYAMIDE	No smoke, the material will pull out to form a thread and there is a smell of burnt horn.
POLYCARBONATE	Gives off a yellowish sooty smoke with a sweet smell.
ABS	Gives off black smoke with soot flakes and a sweet smell.