







1. Smart Materials Demonstration Box

The smart materials handling case contains a vast array of smart and unusual materials and is ideal for those required to give presentations or demonstrations about materials. The case includes a smart materials book and some basic accessories for handling the materials. Case size: $46 \times 33 \times 15$ cm.

Case contents:

- Thermally responsive materials: thermochromic pigment, thermofilm, thermal paper (fax), phase change powder, thermocord
- Smart alloys and polymers: shape memory polymer, smart putty, rare earth magnet, shape memory wire, memory wire, 2-way memory spring, conductive polymer, smart link tubing
- Optically responsive materials and LEDs: glow-in-the-dark film, optical fibre, UV fluid, UV beads, LEDs, smart film, lenticular film
- Fibres and woven materials: cocoons, kevlar fabric, carbon fibre fabric, ripstop nylon, silk, lycra, genuine carbon fibre sheet, electrotextile
- Special polymers: polymorph, hydrogel, expancel, chromatic alginate, ecofilm
- 'Nano' materials and others; QTC pills, chameleon nano flakes, piezo transducer, mirror film

Code	Pack	Price
SEL1416	Each	£135.44

2. Photochromic Pigment

These pigments normally have a pale, off-white appearance but in sunlight or UV light they instantly change to a bright, vivid colour. The pigments revert to their pale colour when away from sunlight or UV light. If the pigment is mixed with a binder such as our acrylic base (SEIT9011), it can be permanently applied to almost any surface. The more dilute the pigment, the less dramatic the colour change; the mixing proportions are therefore a matter for trial and error but a 50:50 mix is a good starting point. Supplied in a plastic syringe containing 3g of pigment.

Code	Description	Pack	Price
SE233-201A	Blue	Each	£3.74
SE233-202A	Orange	Each	£3.74
SE233-200A	Magenta	Each	£3.32

3. Smart Acrylic Base

400mL of white acrylic base material suitable for use with thermochromic and photochromic paints, etc.

Code	Pack	Price
SEIT9011	Each	£7.16

4. Field's Metal

This remarkable alloy melts at just 61°C, but does not contain lead or cadmium. It is relatively hard and extremely tough. It is used, for example, to fill small tubes for bending without crushing, castings for models and jewellery, and for making precision moulds. Fields metal makes a fantastic demonstration of how several constituents, each with a much higher melting point, can be combined to produce a fusible alloy. Supplied in pots of 10g.

Code	Pack	Price
SE234-015A	Each	£11.43