Plastic

Types of plastic:

1. Thermosetting Plastic
2. Thermoplastic

Thermosetting Plastic

These are strong, hard plastics and not softened by heat. These are used to produce plastic laminates. Plasict laminates are made by subjecting layers of paper impregnated with plastic resin to high pressure and temperature. These are of two types **Melamines** and **Phenolics**.

Melamine: these are used for tableware, tray, and laminated work tops. Brand names can be: Formica, Laminex

Phenolic: these are used for buckets, mugs, telephone, toilet seat, etc. These can be boiled so suited in kitchen or hospitals

Thermoplastic

Majority of items in hotels & other institutions fall into this category:

Acetal Resins: these resist boiling, chipping & scratching, and are used for knife handles in particular

Acrylics: although extremely light weight & strong they will scratch easily and are damaged by contact with very hot liquids. They are used for furniture & protective panels.

Cellulose Acetate & Nitrate: this is pliable plastic used for brush handles, light fittings, lampshades, etc.

Polyamide: this is used for kitchenware, knife handles, brushes (bristles), curtain fitting, abrasive pads, etc. It will withstand sterilization.

Polyester: this may be used on its own trays, lampshades, etc. or it may be reinforced with glass fibers and molded into laundry skips, it is also used in the construction of resin seamless floorings.

Polyethylene/ Polythene: used for plastic bags, squeeze bottles, etc.

Polypropylene: used for dustbins, buckets, etc. can with stand sterilization.

Polystyrene: this is found in three forms. The crystal type—is clear, glossy & brittle and used for domestic kitchen utensils & equipment. Toughened varieties—used for refrigerator linings, fan blades, etc. Expanded polystyrene—used as tiles.

Polyurethane Foam: rigid fabric used for insulation but it is more frequently found in the manufacture of mattress, carpet under lays, sponges, mops, as a clear seal for wooden furniture etc. It gives heat and sound insulation but there is a considerable fire risk. Foam can be treated for fire resistance but it becomes too expensive

Polytetrafluoroethylene (PTFE): used in kitchenware and on the base of irons.

Polyvinyl chloride (PVC): It is used in the form of tiles or sheets. It is used to coat wallpaper, wood products or as a floor covering to render them washable. In its rigid form it is, used in the curtain tracks, soil and waste pipes, electrical conduits etc.

Acrylonitrile: this plastic is used for tableware & for outer casings of vacuum cleaner, etc.

Note: Synthetic fibers- Polyamide, Polyester and acrylic can be formed into fibers/ long filaments which have great strength, poor absorbency, durable, are easy to clean and quick to dry. They are used to make carpets, curtains, beddings, uniforms etc.

Maintaining and Care Plastics

- Dusting
- Light soiling can be removed by wiping with warm synthetic detergent, followed by rinsing, drying & buffing
- Textured surface may need scrubbing with a soft brush
- Stains can be removed by rubbing with a clean cloth soaked in methylated spirit
- Small items may be soaked in hypochlorite bleach

Points to be kept in mind:

- Keep away from direct heat or flames
- Do not use harsh abrasives
- Do not drag heavy object over plastic surfaces or chop or cut on them
- Keep away from strong acid or alkalis
- Some plastics are damaged if heavy objects are dropped on to them