

Styrofoam Blocks

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Materials & Stock



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Styrofoam blocks are rigid expanded polystyrene foam used for models, insulation, buoyancy, packaging and CNC and hot-wire carving. They are cheap, light and form quickly, but they melt under solvents and compress under pressure.

Key Features

- Rigid closed-cell foam
- Blocks from 100 mm to 500 mm
- Hot-wire and CNC machinable
- Buoyant and insulative
- Very lightweight

Typical Uses in the Workshop

- Carve architectural and product models
- Build floats and buoyancy demos
- Insulate and pack projects
- CNC and hot-wire shaping practice

Safe Operation

1. Drag a knife or hot wire through the block
2. Shape with rasps and sandpaper
3. Glue with water-based adhesives only
4. Cut dry with clean tools
5. Seal before painting with solvent-free paint

SAFETY NOTES

- Solvent glues and paints melt styrofoam - avoid
- Hot wires need ventilation - fumes irritate
- Styrofoam dust is static - mask when abrading
- Do not burn styrofoam - toxic fumes
- Keep crumbs off the floor - slip hazard

Maintenance & Consumables

- Store blocks flat and clean
- Keep offcuts for practice
- Check the stock does not crumble
- Keep hot wire tools with the material
- Sort the block sizes

Specification & Buying Notes

Buy blocks in the sizes the course carves and machines. Higher density cuts cleaner. Add a hot wire cutter and water-based PVA for assembly.