

Delrin (Acetal) Plastic Stock

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



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Delrin (acetal) is a strong, stiff, low-friction engineering plastic that machines to close tolerances and holds precise dimensions, ideal for gears, bushes, slides, rollers and jig components. It is the go-to plastic for moving mechanical parts.

Key Features

- Low moisture absorption - stable dimensions
- Low friction coefficient
- Excellent machinability
- Black, white and natural grades
- Rods, sheets and tubes

Typical Uses in the Workshop

- Turn and machine gears, bushings and rollers
- Build slides, cams and mechanisms
- Make jig and fixture components
- Prototype precision plastic parts

Safe Operation

1. Support the stock firmly in the chuck or vice
2. Machine with sharp carbide tools
3. Drill and ream carefully near edges
4. Deburr machined edges
5. Clean the parts of chips

SAFETY NOTES

- Acetal fumes when overheated - keep tools sharp
- Do not machine loose stock
- Wear eye protection for flying chips
- Keep away from flames - it burns
- Store dry

Maintenance & Consumables

- Store rods and sheets flat and clean
- Keep the stock dry
- Check for surface contamination
- Keep offcuts labelled for reuse
- Clean cutting oils off before storing

Specification & Buying Notes

Delrin rod from 10-40 mm plus sheet in 6-12 mm covers most mechanical projects. Quality acetal machines to size; cheap grades squeal and chip. Buy from plastics suppliers.