**Material recommendations**

Not every mold finish produces the same results with every material.

Finish/Material

Glossy finish A-1 A-2 A-3

ABS Average Average Good

Polypropylene (PP) Not recommended Average Average

Polystyrene (PS) Average Average Good

HDPE Not recommended Average Average

Nylon Average Average Good

Polycarbonate (PC) Average Good Excellent

Polyurethane (TPU) Not recommended Not recommended Not recommended

Acrylic Excellent Excellent Excellent

Semi-glossy finish B-1 B-2 B-3

ABS Good Good Excellent

Polypropylene (PP) Good Good Excellent

Polystyrene (PS) Excellent Excellent Excellent

HDPE Good Good Excellent

Nylon Good Excellent Excellent

Polycarbonate (PC) Good Good Average

Polyurethane (TPU) Not recommended Average Average

Acrylic Good Good Good

Matte finish C-1 C-2 C-3

ABS Excellent Excellent Excellent

Polypropylene (PP) Excellent Excellent Excellent

Polystyrene (PS) Excellent Excellent Excellent

HDPE Excellent Excellent Excellent

Nylon Excellent Excellent Excellent

Polycarbonate (PC) Average Not recommended Not recommended

Polyurethane (TPU) Good Good Good

Acrylic Good Good Good

Textured finishD-1 D-2 D-3

ABS Excellent Excellent Good

Polypropylene (PP) Excellent Excellent Excellent

Polystyrene (PS) Excellent Excellent Good

HDPE Excellent Excellent Excellent

Nylon Excellent Excellent Good

Polycarbonate (PC) Excellent Not recommended Not recommended

Polyurethane (TPU) Excellent Excellent Good

Acrylic Average Average Average

from: <https://www.3dhubs.com/knowledge-base/injection-molding-spi-surface-finishes>