

# Plastics Sterilization Compatibility Chart

| Polymer  | Polymer Abbreviation | Autoclave | Dry Heat | Ethylene Oxide (EtO) | Gamma Irradiation | Electron Beam |
|--|----------------------|-----------|----------|----------------------|-------------------|---------------|
| <b>Polyesters</b>                                      |                      |           |          |                      |                   |               |
| Copolyesters   |                      | Poor      | Poor     | Good                 | Good              | Good          |
| Poly butylene terephthalate                            | PBT                  | Fair      | Fair     | Good                 | Good              | Good          |
| Poly ethylene terephthalate                            | ● PET                | Poor      | Poor     | Good                 | Good              | Good          |
| <b>Polyolefins</b>                                     |                      |           |          |                      |                   |               |
| Cyclo olefin copolymer                                 | COC                  | Fair      | Fair     | Good                 | Good              | Good          |
| High-density polyethylene                              | ● HDPE               | Poor      | Poor     | ● Good               | ● Good            | ● Good        |
| Low-density polyethylene                               | LDPE                 | Poor      | Poor     | Good                 | Good              | Good          |
| Polypropylene  | ● PP                 | Good      | Fair     | Good                 | Fair              | Fair          |
| Polypropylene copolymers                               |                      | Good      | Fair     | Good                 | Fair              | Fair          |
| Polyvinyl chloride plasticized                         | ● PVC                | Fair      | Fair     | Good                 | Good              | Good          |
| Polyvinyl chloride unplasticized                       | PVC                  | Poor      | Poor     | Good                 | Fair              | Fair          |
| Ultrahigh molecular weight polyethylene                | UHMWPE               | Poor      | Poor     | Good                 | Good              | Good          |
| <b>Polystyrene/styrenics</b>                           |                      |           |          |                      |                   |               |
| Acetals  | POM                  | Good      | Good     | Good                 | Poor              | Poor          |
| Acrylics   |                      | Poor      | Poor     | Good                 | Good              | Good          |
| Acrylonitrile butadiene styrene copolymer (Abs)        | ● ABS                | Poor      | Poor     | Good                 | Good              | Good          |
| Acrylonitrile styrene acrylate                         | ASA                  | Poor      | Poor     | Good                 | Good              | Good          |
| High heat polycarbonates                               |                      | Good      | Good     | Good                 | Good              | Good          |
| Methacrylate acrylonitrile butadiene styrene copolymer | MABS                 | Poor      | Poor     | Good                 | Good              | Good          |
| Polycarbonates   |                      | Fair      | Fair     | Good                 | Good              | Good          |
| Polystyrene  | ● PS                 | Poor      | Poor     | Good                 | Good              | Good          |
| Polyurethanes  |                      | Poor      | Poor     | Good                 | Good              | Good          |
| Styrene-acrylonitrile copolymer (San)                  | SAN                  | Poor      | Poor     | Good                 | Good              | Good          |
| Styrene-butadiene copolymer                            | SBC                  | Poor      | Poor     | Good                 | Good              | Good          |