



# CYCOLAC™ RESINS

CYCOLAC™ ABS resins are terpolymers which are formed by blending an amorphous thermoplastic copolymer of acrylonitrile (A) and Styrene (S) and an elastomeric component which is usually polybutadiene or a butadiene copolymer (B). The flexibility offered by the use of the three monomer systems allows the property profile to be tailored to meet a broad range of end-use requirements.

| GENERAL PURPOSE |                                                                                    | MFR                                       | FLEXURAL MODULUS | IZOD IMPACT        | VICAT SOFTENING TEMP | UL94 LISTING                       |
|-----------------|------------------------------------------------------------------------------------|-------------------------------------------|------------------|--------------------|----------------------|------------------------------------|
| G320A           | Balanced flow / impact. Good low temperature toughness.                            | 8                                         | 1700             | 32                 | 99                   | HB/1.5                             |
| MG47F           | Multi-purpose, injection molding ABS. (FDA compliant)                              | 18                                        | 2300             | 22                 | 100                  | HB/1.5                             |
| MG94F           | High flow (FDA compliant )                                                         | 12*                                       | 2450             | 18                 | 100                  | HB/1.5                             |
| EXTRUSION       |                                                                                    |                                           |                  |                    |                      |                                    |
| EX58F           | High impact ABS for sheet extrusion and blow molding applications. (FDA compliant) | 4                                         | 2000             | 35                 | 97                   | HB/1.5                             |
| HIGH HEAT       |                                                                                    |                                           |                  |                    |                      |                                    |
| DL100           | High impact, low emissions ABS/PC blend.                                           | 8**                                       | 2250             | 35                 | 105                  | HB/1.5                             |
| DL100LG         | High impact, low emissions ABS/PC blend. Low gloss                                 | 10**                                      | 2200             | 28                 | 105                  | HB/1.5                             |
|                 | Standard Unit                                                                      | ISO1033<br>g/10min                        | ISO178<br>MPa    | ISO180/1A<br>kJ/m2 | ISO306<br>°C         | UL94<br>Flame class<br>rating x mm |
|                 | Condition                                                                          | 220°C/10kg<br>* 220°C/5kg<br>** 260°C/5kg |                  | Notched<br>+23°C   | B/120                |                                    |

# CYCOLAC™ RESINS

## GENERAL VALUE PROPOSITION

### GENERAL PURPOSE

- Excellent colorability
- Good low temperature ductility
- High dimensional stability
- Good electrical propositions
- Good paintability

### RELATIVE COMPARISON OF PROPERTIES

|                              | SABIC® PP | LEXAN™ | CYCOLOY™ | GELLOY™ | XENOY™ | VALOX™ | XYLEX™           | SABIC® PMMA | CYCOLAC™ |
|------------------------------|-----------|--------|----------|---------|--------|--------|------------------|-------------|----------|
| Property                     | PP        | PC     | PC/ABS   | PC/ASA  | PC/PBT | PBT    | PC/<br>Polyester | PMMA        | ABS      |
| Processability               | +++       | +      | ++       | ++      | 0      | ++     | +                | ++          | +++      |
| Low Temperature Impact       | +         | +      | ++       | +       | +++    | 0      | +                | -           | +        |
| Heat                         | 0         | +++    | ++       | ++      | ++     | +++    | ++               | +           | +        |
| Non-halogenated FR available | Yes       | Yes    | Yes      | Yes     | N.A.   | No     | N.A.             | N.A.        | No       |
| UV Stability                 | -         | +      | +        | ++      | ++     | ++     | ++               | ++          | -        |
| Weatherability               | -         | +      | 0        | ++      | ++     | ++     | ++               | ++          | -        |
| Colorability                 | +++       | ++     | ++       | +       | +      | +      | +                | ++          | +++      |
| Aesthetics                   | ++        | ++     | +        | +       | +      | +      | +                | ++          | ++       |
| Paintability                 | 0         | ++     | ++       | ++      | ++     | 0      | ++               | ++          | ++       |
| Density                      | +++       | +      | +        | +       | +      | +      | +                | +           | ++       |
| Modulus/Impact balance       | +         | +      | ++       | +       | ++     | 0      | ++               | 0           | ++       |
| Transparency                 | No        | Yes    | No       | No      | No     | No     | Yes              | Yes         | No       |