Semi-permanent Mold Release Coating
for Composite Molding Systems

Dyna-Tek® DT-6060 Mold Release Product Data Sheet

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Product Summary

DT-6060 can be used as a standalone product when used on clean, low porosity surfaces and finishes. However, it is best used in conjunction with DT-420 Mold Seal coating. When used with DT-420, the coating system results in a very high slip finish. Together they are:

- Proven performance in use with all composite resin systems including toughened Epoxy resin systems, as well as polyester, vinyl-ester, phenolics, BMI.
- Excellent adhesion to most tooling substrates:
  - All metals
  - INVAR
  - Plated finishes
  - Composite tools.
- Glossy, clear finish when fully cured.
- No contaminating transfer of fully cured mold sealer to the molded parts.
- For optimum performance, apply DT-6060 over DT-420 Mold Sealer (see application instructions for DT-420).
- When coated molds begin to show diminished performance, simply clean the mold surface with acetone, methanol or isopropyl alcohol, allow to dry, and then re-apply DT-6060 as needed to refresh surface energy, release and high slip performance.
- No out-gassing (see our Tech Bulletin – “Thermal Analysis of DT-6060”)

Product Characteristics

- Clear – semi gloss
- Pencil Hardness (ASTM D3363) – 6h
- Mandrel Bend (ASTM 522) – 0 mm coating loss or signs of cracking with 180⁰ rotation.
- Solvent Based Polymer
- Odor: Solvent
• No Chlorinated Solvents
• Gloss finish
• One (1) year shelf life from date of manufacture with observance of “special precautions” (below)

Special precautions:
- Moisture sensitive. Always keep the container tightly sealed when not using.
- Can build up pressure. Always carefully open if it has been sitting for a while.
• Outstanding adhesion properties

Product Application

• Easy to apply. Can be wiped on or spray applied.
• Film build between 3-4 microns.
• Curing Options:
  - At room temperature, 6060 will dry to the touch in 20 min. and ideally allowed to air dry for 12 hours at 60° - 110° F. however it may be put back in service again within 3 hours depending up your resin’s properties.
  - To accelerate the curing process, cure for 60 min. at 250 deg. F.
• Application temperature - 40° - 90° F.
• Although 420 can be applied using different techniques (wipe, spray or dip) to increase its initial film build, once fully cured it does not build on itself, therefore there is no build-up on the mold surfaces.

Specific Benefits

• DT-6060 realizes increased durability and adhesion when used with DT-420.
• Cured Thermal Stability – ≤ 370° C. (700° F.)
• Higher tooling ROI, Lower tooling maintenance costs.
  - Tooling life is extended as reapplications of DT-6060 involves no sanding, dry ice blasting or other forms of mechanical etching.
• Increases lay-up cycles, Reduces downtime/set-ups, More production through-put.

SURFACE MAINTENANCE BETWEEN LAY-UPS: AS RECOMMENDED WHEN USING PERMANENT MOLD RELEASES, DO NOT USE METAL SCRAPERS, ABRASIVES OR OTHER MECHANICAL ETCHING TOOLS TO REMOVE ANY LOOSE DEBRI ON THE MOLD SURFACE. USE SOFT PLASTIC SCRAPERS, AND IF NECESSARY; CLEAN THE SURFACE WITH CLEANING SOLVENTS INCLUDING ACETONE, METHANOL (Denatured alcohol) AND ISOPROPYL ALCOHOL PRIOR TO APPLYING ANOTHER COAT OF DYNA-TEK’S MOLD RELEASE; DT-6060.

Safety Information

Refer to our SDS for all safety data.

For more information, call 816.444.6266 and ask for Technical Support or email info@dyna-tek.com