



Semi-permanent Mold Sealer and Release Products for Composite Molding Systems

Dyna-Tek DT-420 Mold Sealer Product Data Sheet

Product Summary

- 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.
- Only requires one application of DT-420 Sealer to the mold surface.
- DT-420 can be applied over itself to reseal areas where wear/abrasion has been removed. Because the DT-420 formulation is engineered not adhere to itself, re-applications over previously coated areas, it reseals only areas where the coating has been scratched or removed.
 - Consequently, re-applying DT-420 does not result in additional coating build-up. See application instructions for more information.
- Reseals mold surfaces without sanding/removing the 1st application.
 - To refresh worn, used molds previously coated with DT-420, clean the surface with Methanol (Denatured Alcohol) and re-apply a new coat of 420 to the entire mold surface. DT-420 adheres to all surfaces where there has been surface wear; and reseals those areas.

Product Characteristics

- Clear
- Pencil Hardness (ASTM D3363) - 9h
- Mandrel Bend (ASTM 522) – 0 mm coating loss or signs of cracking with 180° 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, wipe on or spray.
- Fills in porosity first, before building to a coating thickness of 4-10 microns range is based upon how applied (wipe on, spray or dip).
- Curing Options:
 - At room temperature, 420 will dry to the touch in 45 min. and then fully crosslinks within 5 days at 60 degrees or more.
 - 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

- Sealer with low surface energy itself, the DT-420 enhances and extends the life of DT-6060.
- Cured Thermal Stability – ≤550° C.
- Longer Tooling/Mold Life.
 - No damage to the tooling from hand/power sanding in order to remove existing 420 coats.
 - See easy application instructions for how to reseal rough areas caused by work from surface/tooling repairs.
- Increased production due to less downtime, and increased lay-up cycles.

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 all safety information. When opening DT-420, use care as the containers can experience some pressure build-up.