



TECHNICAL SPECIFICATION S11A

January 22, 2005

TRAP.

The **Model EZT- 420 trap** is extruded from Geon 87549, a plastic that has been selected for it's high impact profile which offers excellent clarity and toughness and incorporates a UV stabilizer. It is processed for bending to our specifications in a Glycol bath at temperatures between 350-380 ° F.

The **Model EZT- 150 Ultratrap MK** is injection molded from Geon 87549, a plastic that has been selected for it's high impact profile which offers excellent clarity and toughness and incorporates a UV stabilizer.

The **Model EZT- 401 economy trap** is blow molded from GEON™ 2188 GC-3V which is an ultra clear rigid high impact compound designed for use in blow molding applications where maximum clarity is required and which incorporates a UV inhibitor compound for use where maximum UV protection is required.

All of these materials are fully compatible with all standard PVC adhesives which are used to attach the traps to the PVC fittings. Physical properties for both types are as detailed below:

| | MODEL EZT- 420/150 | MODEL EZT- 401 | |
|--|-------------------------------|---------------------------|------------------|
| PHYSICAL PROPERTY | VALUE | VALUE | REFERENCE |
| Specific Gravity + - 0.02 | 1.34 | 1.32 | ASTM D792 |
| Tensile Strength, psi. @ 73° F | 6,350 | 6,300 | ASTM D638 |
| Modulus of Elasticity in Tension, psi | 360,000 | 374,000 | ASTM D638 |
| Flexural Strength, psi | 12,400 | 11,200 | ASTM D790 |
| Izod Impact, Ft.Lbs/in., 1/8" notch at | 15 | 21.10 | ASTM D256 |
| Heat Deflection ° F @ 264 psi | 153 | 59.5 | ASTM D648 |
| Hardness - Durometer D | 85 | 79 | ASTM D2240 |
| Hardness - Rockwell | 107 | 105 | ASTM D785 |
| Optical Clarity - Transmittance % | 74 | 82.6 | ASTM D1003 |
| Optical Clarity- Maze (0.65 mil. | 5.0 | 6.3 | ASTM D1003 |
| Cell Classification | 16343 | - | ASTM D1784 |

All data obtained at 73 ° F from injection molded test specimens prepared per ASTM D647 and ASTM D 1897 unless otherwise indicated.

PVC FITTINGS.

All PVC Pipe Fittings are Schedule 40 , Type 1, Grade 1, produced by reputable local or overseas manufacturers in accordance with ASTM specifications and incorporated by us, without modification into the EZ-TRAP. Physical properties are as detailed below:

| PHYSICAL PROPERTY | VALUE | REFERENCE |
|---|--------------|------------------|
| Specific Gravity + - 0.02 | 1.40 | ASTM D792 |
| Tensile Strength, psi. @ 73 ^o F | 7100 | ASTM D638 |
| Modulus of Elasticity in Tension, psi @ | 400,000 | ASTM D638 |
| Flexural Strength, psi | 12,000 - | ASTM D790 |
| Izod Impact, Ft.Lbs/in., notch at 73 ^o F | .65 | ASTM D256 |
| Heat Deflection ^o F @ 264 psi | 160 | ASTM D648 |
| Heat Resistance ^o F | 140 | - |
| Thermal Conductivity, BTU/hr./sq.ft./ ^o | 1.2 | ASTM C177 |
| Coefficient of Expansion, in./in./ ^o F X | 3.0 | ASTM D 696 |
| Water Absorption, %/24 hrs. @ 73 ^o F | .05 | ASTM D570 |
| Cell Classification | 12454B | ASTM D1784 |
| Color Code | White | - |

SWITCHCAP/FLOAT ASSEMBLY (EZT 200/220 SERIES Only)

The Switch/Cap Assembly which provides a stable housing for the microswitch, and the terminal cover, are custom injection molded in our own tooling, from LUSTRAN SPARKLE SAN, #2090 Styrene Acronitrile Recyclable plastic from General Polymers Inc. Physical properties are as detailed below:

| PHYSICAL PROPERTY | VALUE | REFERENCE |
|--|--------------|------------------|
| Specific Gravity | 1.07 | ASTM D792 |
| Tensile Strength, psi. @ fail | 9000 | ASTM D638 |
| Elongation @ fail | 2.1 | ASTM D638 |
| Tensile Modulus,psi. | 470,000 | ASTM D638 |
| Flexural Modulus,psi. | 500,000 | ASTM D790 |
| Flexural Strength, psi @ yield | 16,000 | ASTM D790 |
| Izod Impact, Ft.Lbs/in., notch at 73 ^o F | 0.40 | ASTM D256 |
| Heat Deflection ^o F @ 264 psi | 200 | ASTM D648 |
| Vicat Softening Temperature, ^o F | 226 | ASTM D1525 |
| Deformation under load,%@ | 1.5 | ASTM D621 |
| Coefficient of Expansion, in./in./ ^o F X 10 ⁻⁵ | 3.8 | ASTM D 696 |
| Water Absorption, %/24 hrs. @ 73 ^o F | 0.25 | ASTM D570 |
| Hardness, Rockwell | 75 | ASTM D 785 |

SWITCH (EZT-200/220 SERIES Only)

The Switch is a standard configuration microswitch with a light force modification, supplied by a UL recognized domestic or overseas vendor. It features a flame retardant UL94VO self extinguishing case and cover, long life stainless steel spring mechanism, stainless steel actuator arm, arc resistant case with internal barriers, and meets all International Dielectric standards.

It includes single throw, Normally Open & Normally Closed contacts and is rated at 4 Amps at 125/250 Volts, AC.

It carries the following labels: VDE Germany, SEV Switzerland, SEMKO Sweden, CSA Canada and is a Recognized Component by UL USA.

PLASTIC CLOSURE CAP (All Models)

The Cap is a standard Model of our own design which is available in 2 sizes to fit standard ¾" and 1" PVC fittings and is custom injection molded from commercial Polypropylene material to our standards in tooling which is owned by us. It incorporates a PPI-46-UV stabilizer concentrate which will result in a 4-6 year stabilization package. Physical properties are as detailed below:

| PHYSICAL PROPERTY | VALUE | REFERENCE |
|--|--------------|------------------|
| Specific Gravity (density) | .0925 | ASTM D792 |
| Tensile Strength, psi. @ 73° F | 1500 | ASTM D638 |
| Elongation, % | 100 | - |
| Tensile Modulus, 15 ⁵ psi. | 0.14-0.38 | - |
| Izod Impact, Ft.Lbs/in., notch at 73 ° F | 0.5-20.0 | ASTM D256 |
| Heat Resistance ° F | 150 | - |
| Water Absorption, %/24 hrs. @ 73 ° F | 0.015 | ASTM D570 |
| Burning rate | 1.04 | - |
| Hardness, Rockwell | D41-D46 | ASTM D785 |
| Flexural Modulus | 50,000 PSI | ASTM D790 |
| Softening Point | 189 ° F | ASTM D1525 |
| Melt Index, g/10 min. | 52 | ASTM D 1238 |

CABLE

Standard industrial cable, UL labeled, continuously imprinted with UL Logo and specification number. It is supplied complete with USA made UL labelled female spade terminals which are

manufactured by a reputable American manufacturer and are machine applied to our specifications. It conforms to the following specifications:

TYPE: #18 3/C UL BOND

GAUGE: 18AWG

STRANDING: 16 STRANDS OF 30AWG TINNED COATED COPPER

CONDUCTORS: 2 or 3 depending on model selected.

INSULATION: .032 PVC

TEMPERATURE: 105 DEGREES C.

VOLTAGE: 600

COLOR CODE: 1) BLACK 2) WHITE 3) RED or 2 BLACK only.

UL APPROVAL: STYLE 1015 or AWM

CSA APPROVAL: TEW or FT-1

O.D.: .110 X .330

TESTING AND APPROVALS

All EZTRAP switched models in the 200 Series have been tested and/or approved by independent third party entities as follows:

1. Cycle test at ambient and elevated temperatures by SGS US Testing Company, Fairfield NJ, 07004, Report Number 119956, February 9, 1999.
2. Authorization from Underwriters Laboratories Inc, Mellville NY 11747 to designate all models in the 200/220 Series as a UL Listed Component under File number E232286, issued October 14, 2002.
3. Approval by the City of Los Angeles Department of Building and Safety, Mechanical Testing Laboratory for the use of the 100 and 200 and 220 Series. File number RR 5555, September 6, 2004.
4. IAPMO approval for all models, File number M-4713 dated January 2005.