

## **BonDuit<sup>®</sup>** Conduit Adhesive

### DESCRIPTION

BonDuit<sup>®</sup> Conduit Adhesive joins polyethylene duct to PVC, fiberglass, and metal duct using standard PVC couplings. This rapid-cure, two-part resin adhesive forms a durable bond for a strong, permanent, water-tight joint.

BonDuit<sup>®</sup> Conduit Adhesive is a versatile field-friendly conduit joining solution. It works for multiple conduit types and sizes. It is easy to use and no special training is required.

### ADHESIVE SHEAR STRENGTH

Typical bond strengths were measured by joining two pieces of HDPE conduit with a PVC coupling and BonDuit<sup>®</sup> Adhesive. The force required to pull apart the joint after 24 hours at 70° F was measured.

Conduit Diameter	Pullout Force
1 Inch	724 lbs <sub>f</sub>
1-1/2 Inch	1,233 lbs <sub>f</sub>
2 Inch	2,025 lbs <sub>f</sub>
4 Inch	5,333 lbs <sub>f</sub>

Results based on 3rd-party laboratory testing.

### HYDROSTATIC (PRESSURE) TESTING

BonDuit<sup>®</sup> Conduit Adhesive forms a water-tight joint. HDPE duct was joined to PVC duct with a PVC coupling and the adhesive. The ducts were filled with water, sealed, pressurized to 60 psi, and observed over time for leakage. The joint was then subjected to a short duration, high pressure test.

Test Duration	Result
1,000 Hours	No Leaks

Continuous pressure test based on ASTM D1598, "Time to Failure of Plastic Pipe Under Constant Internal Pressure."

<u>Short Duration High Pressure (Burst Test)</u>	
Maximum Pressure	Result
> 250 psi	No Leaks

Burst test based on ASTM D1599, "Resistance to Short-Time Hydraulic Pressure of Plastic Pipe, Tubing and Fittings (Burst Test)."



**Bonduit<sup>®</sup> Conduit Adhesive is supplied in a two-part cartridge and is mixed as it is applied.**

### PRODUCT BENEFITS:

- Easy to use
- Fast cure
- Durable bond
- Water-tight and air-tight seal
- High tensile strength
- Suitable for most common ducts

### END USE:

BonDuit<sup>®</sup> Conduit Adhesive bonds polyethylene to:

- PVC Couplings
- Concrete Vaults
- Transition Couplings
- Above Ground Conduits
- Steel Sweeps and Elbows
- Fiberglass and Composite Connections



## MODEL SPECIFICATION

Approved conduit joining system is BonDuit® Conduit Adhesive. The conduit adhesive shall come in a multiple-use cartridge to bond various conduit connections without special fitting or positioning jigs. The packaging shall automatically mix and meter the adhesive. The cure rate for the adhesive shall be fast, reaching 50% of final strength in one hour (@ 75° F), and 80% of final strength in two hours (@ 75° F). The peak exotherm temperature of mixed product shall not exceed 200° F (20 gram sample.) Product shall be suitable for use on various duct materials, multiple duct sizes and connection types.

Once cured, the adhesive seal shall be airtight and watertight. A one-inch, PVC coupling sealed to a polyethylene duct with the adhesive shall hold 120 psi air pressure after curing one hour at 75° F. The pull-out strength of a two-inch polyethylene duct sealed to a PVC coupling shall be at least 910 lbs force after curing one hour at 75° F and at least 1820 lbs force after curing for 24 hours. The adhesive shall have a minimum flexural strain of 2% as measured by ASTM D790.

The cured adhesive shall be resistant to water, salt water, oils, and uv degradation. The cured bond shall withstand temperature extremes from -60° F to 250° F. It shall withstand multiple freeze-thaw cycles. The cured product shall be non-conductive with a minimum dielectric strength of 450 Volts/Mil as measured by ASTM D149.

## ORDER INFORMATION

<u>Part No.</u>	<u>Package Description</u>
BT-KITG	Kit contains: 2 50-ml BonDuit® Adhesive Cartridges 8 Mixing Nozzles 1 Strip of Sanding Cloth 8 TR-1 Cleaning Wipes 1 Instruction Sheet 1 Dispensing Tool
BT-KIT	Kit contains: 2 50-ml BonDuit® Adhesive Cartridges 8 Mixing Nozzles 1 Strip of Sanding Cloth 8 TR-1 Cleaning Wipes 1 Instruction Sheet (Dispensing tool not included.)
BT-KITB6G	Bulk kit contains 6 Individual Kits, BT-KIT 1 Dispensing Tool Included
BT-KITB6	Bulk kit contains 6 Individual Kits, BT-KIT (Dispensing tool not included.)
BT-TOOL	1 Dispensing Tool
BT-10NOZZLE	10 Mixing Nozzles
BT-CART12PK	12 50-ml BonDuit® Adhesive Cartridges in a Package

*\*\*Slower curing version BonDuit® Conduit Adhesive available (BTSC). Call your local Vikimatic customer service representative for details.*