

## 5 GD<5 @HWELDER BLACK FOR 5 GD<5 @HREPAIR

☒] ☒] Welder is a low viscosity, fast-reacting urethane polymer, which is applied with [ ~ ] Vari-Flow dispensing equipment, specially designed for this product.

### PRODUCT DESCRIPTION

☒] ☒] is recommended for larger highway and other projects where extensive repairs are needed. It can be used with a variety of aggregate materials, depending on the requirements of the specific application. Multiple repairs can be completed in rapid succession with minimal traffic closure time.

### USES

Asphalt Welder is a multi-purpose material that works well for both concrete and asphalt repairs. It allows the user to solve several problems with one material. Because it is a very thin liquid it can penetrate into small cracks and forms a high strength adhesive bond between broken structures. ☒] ☒] will flow underneath cracked or spalled ☒] ☒] and seal the base against further erosion from water.

- pothole, spall and crack repair
- highway and parking lot repair
- bridge and slab repair

### KEY ADVANTAGES

- Quick Set - Less Than 10 Min
- Minimal Prep - No Primer Required
- Shorter Traffic Closures - Reduced Labor Costs
- Waterproofs Both Asphalt and Concrete
- Protection Against Oils, Gasoline Hydraulic/Brake Fluids and Water
- Longer Lasting Than Conventional Repair Materials
- Odorless and Vaporless

### LIMITATIONS

☒] ☒] must be clean and dry before beginning repair. Add catalyst in temperatures below 45 (degree symbol). In temperatures over 100 (degrees) keep material cool prior to use.

### PACKAGING

☒] ☒] is packaged in 21-oz. cartridges for hand application or a 10-gallon kit, 30-gallon kit, or 100-gallon kit for machine application.

### INSTALLATION

**ASPHALT WELDER** when used in combination with aggregates forms a high performance, rapid setting polymeric ☒] ☒]. Within ten minutes of placement, durable, long lasting repairs are ready for traffic. Withstands vibration, heavy traffic loads and thermal movement.

#### **Solidifies in less than two minutes.....**

The reaction is fast. Thin, equal volume, "A" and "B" side liquid polymers are metered, combined and pumped through [ ~ ] dual component dispensing equipment. The reactive mix is percolated over aggregates and solidifies in two minutes. It cures to a flexible polymer ☒] ☒] suitable for repairing spalls and potholes, matching grades, smoothing rough pavements, and repairing rutting. Product can smooth mismatching grades of adjacent slabs. When used without preplaced aggregates ☒] ☒] makes an excellent joint sealant for control joints, utility cuts or traffic loops.

#### **Thin overlays easily formed.....**

☒] ☒] cracked and damaged by overloading, freeze/thaw spalling, or fires can be easily re-surfaced. Decks are sealed and waterproofed. High traction surfaces are easily created.

## 5 GD-5 CH WELDER BLACK FOR 5 GD-5 CH REPAIR

### PRODUCT INFORMATION

5 GD-5 CH Welder is a low viscosity waterproof - two component urethane consisting of equal parts of A side, a diphenylmethane di-isocyanate urethane pre-polymer, and of B side, a polyether diols triols. 5 GD-5 CH is 100% solids and contains no VOCs. 5 GD-5 CH is dispensed by a pump at a 1 to 1 ratio of parts A & B and combined with a clean DRY 3/8 inch round washed dried pea stone or washed DRIED size 1A aggregate, with lack of moisture content being key.

### STORAGE

Store in cool dry, ventilated storage area, in closed containers and out of direct sunlight in rooms with ambient temperatures maintained between 32 degree and 80 degrees F.

### SURFACE PREPARATION

- Method of Cleaning - Saw cut or hammer the perimeter of the repair site back to sound concrete using abrasive blasting remove loose concrete, dirt, and dust using a minimum 150 psi continuously dry compressed air. Wet saw cut is NOT recommended unless sufficient time for drying is allowed.
- Level of Cleanliness – Removal all loose and foreign materials by profiling surfaces in accordance with ICRI Guide 03732 to a minimum of CSP 3 by abrasive blasting.
- Moisture content of structure – Maximum moisture content is 5% measured by a moisture meter. 5 GD-5 CH may be dried with a propane torch as necessary to achieve this. Only place 5 GD-5 CH in temperatures between 40 degrees and 100 degrees F. and on concrete with a surface temperature at least 5 degrees F. above the dew point and avoid application over damp surfaces.
- Concrete surfaces being prepared must be fully cured 28 days and fast setting concrete surfaces being prepared must be fully cured 7 days.
- For applications over previously installed polymers, the polymer surfaces must be cleaned, abraded and vacuumed prior to placement.

### APPLICATION PROCEDURES

- Pre-application: Pre-condition both drums of Parts A and B 5 GD-5 CH to 50-70 degrees F before use. Using the stir stick provided to mix Part B for a minimum of 5 minutes prior to initial use of Part B drums.
- Using the pump dispensing machine, with the manifold and static tube removed, perform the 1 to 1 ratio test of Parts A and B by pumping about a quart into two separate recipients and verify the machine is pumping equal volumes in each before proceeding with the repair.
- Place and level out approved aggregate to within about 1/4 inch of surrounding surface and using the machine, dispense 5 GD-5 CH into the repair site completely immersing the aggregate. It is not necessary to use 5 GD-5 CH as a primer.
- For repair sites greater than 3 inches deep apply aggregate and 5 GD-5 CH in 3 inch lifts without waiting for cure of previous lift and trowel level with surrounding surface and avoid overfilling.
- For topping sand use top rock or bagged US Silica washed and dried coarse sand and add to refusal.

Note: With the addition of catalyst to the B side drum of the 5 GD-5 CH before shipping, the installation can typically be ready for traffic in about 20 minutes at 70 degrees F. with the cure faster in warmer temperatures and slower in colder temperatures.

### EFFECT OF TEMPERATURE ON SET TIME

TEMPERATURE	SET TIME	RETURN TO SERVICE
80-100 degrees F.	3 minutes	15 minutes
60-80 degrees F.	5 minutes	25 minutes
40-60 degrees F.	7 minutes	40 minutes
20-40 degrees F.	10 minutes	60 minutes

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### CLEANING AND MAINTENANCE

For machine, clean the three manifold ports and threads on tube ends daily after use with acetone. Flush A side pump and lines through manifold with vegetable oil when storing machine more than 3-4 weeks between uses.

For hand tools, wipe clean with dry cloth before cure.

Cured material must be removed mechanically. Do not attempt to burn off cured material.

### DEFICIENCY AND REPAIR

5 GD<5 @HWELDER can be saw cut and ground similar to asphalt ideally after a 24 hour period but if necessary after 1-2 hour cure depending on the ambient temperature. If excess material needs to be removed, saw cut, sand, or grind as needed.

### MATERIAL REQUIREMENTS

**Physical Test Requirements.** Elastomeric 5 GD<5 @HWELDER will conform to the following physical test requirements per NYS DOT Standard Specification 701-11:

\*The physical information shown in the column on the right in the table below are the results of the New York State DOT Materials Testing Laboratory test of 5 gd\ UhK YXYf product in March 2014.

New York State DOT Contact: Guy Hildreth 518-485-5431

TESTS	PROCEDURE	MINIMUM REQUIREMENTS	5 gd\ UhWelder
Resilience	ASTM C579-01	70%	Pass
5 hr. Compressive Strength	ASTM C579-01 Mod.	3.45 MPa (500 psi)	2,700+ psi
24 hr. Compressive Strength	ASTM C579-01 Mod.	14 MPa (2000 psi)	6,400+ psi
7-Day Tensile	ASTM D638	1 MPa (150 psi)	1,100+ psi
7-Day Tear	ASTM D624	7kN/m (40 lbf/in)	150+ lbf/in
Pot Life	Gardeo GT-S gel timer	5 minutes	Pass



## TECHNICAL DATA SHEET

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### HEALTH AND SAFETY INFORMATION

**EYE CONTACT:** Immediately flush eyes with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel.

**INHALATION:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, give oxygen. Consult medical personnel.

**SKIN CONTACT:** Wash material off the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

**INGESTION:** Do not induce vomiting. Give 1 or 2 glasses of water to drink and refer person to medical personnel. Never give anything by mouth to an unconscious person.

### TECHNICAL DATA

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7-Day Tear	ASTM D624	150+ lbf/in

### RETURN POLICY

Our products are manufactured to conform to the specifications published in our product data sheets. We do not warranty the performance of our materials or equipment. <http://www.geocheminc.com/disclaimer.htm>

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