

Instructions for the use of AS 475 Sensor Grout with MSI BL Sensors.

These instructions are intended to be used in conjunction with the AS 475 instructions and MSDS sheet. These instruction are only intended to give the details for using less than a full container of AS475 grout.

The exact proportion of the grout and the catalyst is less critical than with other systems (such as epoxy or polyurethane) The big variable will be the cure time and pot life.

1. Premix the large container of the grout, using a suitable electric drill (single speed - 450 to 550 rpm) and a mixing paddle. Make sure that the mixed material is smooth and homogenous and that there is not solid material left in the bottom of the container, without any lumps.
2. Pour out 3 liters of the grout resin. Pour this into a mixing container, such as a 1 gallon mixing pail. Note: This is a generous amount for a 6' sensor, in a 3/4" wide slot that is 1" deep. If you have extra after installing the first sensor, slightly decrease the amount used for subsequent sensors.
3. Determine the amount of catalyst to use, based on the road temperature.

Temperature		Amount of BPO (Catalyst) to be used
C°	F°	For 3 Kg (3 liters) of grout
<13	<55	1 x 33 g Vials
13-24	55-75	0.67 x 33 g Vials (i.e. 2/3)
>24	>75	0.33 c 33 g Vials (i.e. 1/3)

4. Pour the BPO powder into the grout mixture.
5. Mix the grout and the BPO Powder thoroughly for an additional 2 minutes. You now have a 5-10 minute working time before the grout mixture will start to partially cure.
6. Pour the grout mixture over the sensor, making sure that there are no voids or air bubbles when applying the grout mixture. There is a tendency for the material to slightly shrink as it sets, so make sure that it is slightly overfilled. ( $\approx 1/16"$ ). Remove any tape that has been used prior to the grout mixture curing.
7. Clean any uncured grout mixture from tools and equipment with paint thinner. Once the grout is cured, it can be removed only by mechanical means.
8. Once the BPO powder has been added to the mixture, there is 5-10 minutes before the mixture partially cures. AS 475 fully cures in 30-40 minutes.