General Information

This trap, packed with activated charcoal, should be used mainly for removing the trace amounts of hydrocarbons and organics from carrier gases. Water and other contaminants, which cannot be trapped by the activated charcoal, may be removed by a Molecular Sieve 5A trap. Ideally, a Molecular Sieve 5A trap and an activated charcoal trap should be used in series, with the gas flowing through the activated charcoal trap before the molecular sieve.

Fitted with 1/8-inch od Swagelok fittings, the trap is installed directly between the gas line regulator and the gas inlet on the back of the instrument. Since the trap body is constructed of stainless steel, it can be conditioned or regenerated at high temperatures without removing the packing. Its unique S-shape also makes it compact to fit in most GC ovens for conditioning/regenerating.

Once in operation, the gas flow pressure drop across the trap is minimal, for example, nitrogen at 150 mL/min flow rate through 22 grams of activated charcoal drops approximately 2 psig.
Conditioning

This trap has been conditioned but may need to be reconditioned before use, particularly if the desired use is with a different gas than was used for conditioning at the factory.

To condition the trap (Figure 1), remove caps (A) on both ends. Attach one end of the trap to gas supply with suitable tubing. If the trap has been used, attach gas supply to downstream end to reverse flow direction through the trap.

![Diagram of conditioning the trap]

**Figure 1. Conditioning the Trap**

Use clean helium, nitrogen, or other suitable inert purge gas, usually the same gas that the trap will be used with. The gas should not react with the charcoal at the conditioning temperature. Air or oxygen should not be used.

**WARNING**

Remove columns from GC oven prior to conditioning trap!

Set the flow rate to 60 to 100 mL/min, and the oven temperature to 350°C. Make sure there are no columns or other accessories installed that will be damaged with the oven at 350°C.

**WARNING**

If hydrogen is used as purge gas, the exhaust gas should be vented outside the GC oven in a suitable manner.
Reduce the flow to 10 to 30 mL/min and cool the oven. When the oven is cool, disconnect the trap and immediately install it in the desired flow line or seal the trap with the proper tubing plug and cap.

**Installation**

Connect trap in-line between gas source supply and gas inlet on instrument, with suitable tubing and/or adapter fittings.

**Regeneration**

Trap regeneration should be done on a periodic basis, for example, after using one to four cylinders of gas depending on the grade or purity of the gas. The same method and parameters are used for the initial conditioning.

**Table 1. Ordering Information**

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
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</thead>
<tbody>
<tr>
<td>Conditioned Moisture Trap</td>
<td>5060-9084</td>
</tr>
<tr>
<td>Conditioned Hydrocarbon Trap</td>
<td>5060-9096</td>
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