

## Customer Support Note 007

# Identifying cold traps for UNITY (series 2 & xr) and TD100 (all series)

*Disclaimer: It is vital that this Customer Support Note is read carefully before proceeding and that any instructions contained within the document are followed closely. Markes International will not accept responsibility for any damage done to instrumentation or personnel if any instructions within this document are not followed exactly. Any ongoing warranty or contract may be voided if failure to follow these instructions results in damage to the instrumentation. If anything is unclear, you must clarify the details with a Markes representative before proceeding.*

Markes International has a number of cold traps available for a wide variety of applications. The cold traps contain one or more of the following sorbents:

- Porous polymer: Granular, off-white
- Graphitised carbon black: Granular, grey or black
- Carbonised molecular sieves: Spherical, shiny or dull black.

To assist identification, the cold traps currently available from Markes International are illustrated below:

### U-T1HBL-2S – High-boilers



For high-boiling compounds from C<sub>6</sub> to C<sub>40</sub>.

### U-T2GPH-2S – General-purpose hydrophobic



For general-purpose analysis, including compounds from C<sub>4/5</sub> to C<sub>30</sub>-C<sub>32</sub>. The trap allows selective elimination of some water.

### U-T3ATX-2S – Air toxics/T0-14



For very volatile compounds such as permanent gases from C<sub>2</sub> to C<sub>12</sub>.

**U-T4WMT-2S – Water management**

For volatile compounds from C<sub>2</sub> to C<sub>20</sub>. The trap allows selective elimination of some water.

**U-T5O3F-2S – Ozone precursor/freon**

For analysis of ozone precursors from acetylene to trimethylbenzene and freons.

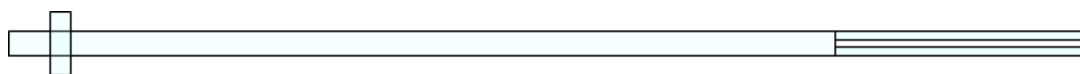
**U-T6SUL-2S – Sulfur**

For volatile compounds and reactive species such as sulfur-containing compounds.

*(Image not currently available)*

**U-T7EMP-2S – Empty**

Shipped with a sorbent-retaining spring and 25 mg of quartz wool.

**U-T8CUS-2S – Custom**

This cold trap can be packed with sorbents as required – please contact Markes for further information.

**U-T9TNX-2S – Tenax**

For volatile compounds from C<sub>6</sub> to C<sub>30/32</sub>.

**U-T10CW-2S – Chemical weapons**

For volatile compounds from  $C_6$  to  $C_{40}$ , especially for defence applications.

**U-T11GPC-2S – General-purpose graphitised carbon**

For general-purpose analysis of volatile compounds from  $C_{4/5}$  to  $C_{30/32}$ .

**U-T12ME-2S – Material emissions**

For volatile compounds from  $C_4$  to  $C_{32}$ . This trap can help to selectively eliminate some water.

**U-T13DHS-2S – Dynamic headspace (DHS)**

For volatile compounds analysed using dynamic headspace in the semiconductor industry.

**U-T14H2S-2S – Hydrogen sulfide**

For on-line analysis of hydrogen sulfide and other volatile sulfur-containing compounds.

**U-T15ATA-2S – Air toxics (TO-15 and TO-17)**

For very volatile compounds such as permanent gases to semi-volatile polar compounds, from  $C_2$  to  $C_{30}$ .

**U-T16GHG-2S – Greenhouse gases**



For very volatile compounds from C<sub>2</sub> to C<sub>14</sub>.

**U-T17O3P-2S – Ozone precursor**



For ozone precursors from C<sub>2</sub> to C<sub>14</sub>.

**U-T18325-2S – 325 Standard**



For analysis according to US EPA Method 325.

**U-T19PAH-2S – PAH**



For the analysis of polycyclic aromatic hydrocarbons.

**U-T20PAM-2S – PAMS**



For the analysis of C<sub>2</sub>-C<sub>12</sub> compounds monitored under the US EPA PAMS scheme.

**U-T22117-2S – China Air 117**



For monitoring of PAMS, TO-15 compounds and OVOCs under the 117-compound China EPA regulation.

**For all technical support queries, please contact Markes International.**

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