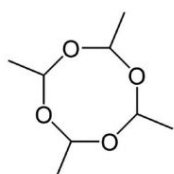
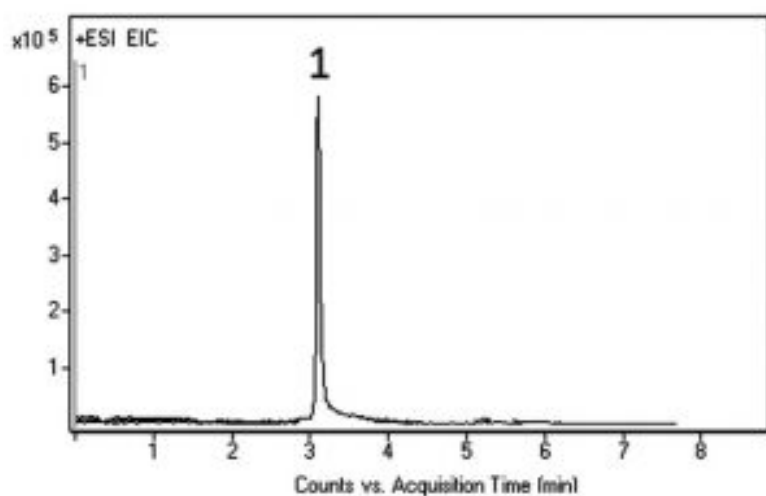


## Metaldehyde in Slug Pellets Analyzed by LCMS – AppNote

### Pesticide Formulation

As Metaldehyde is a non-UV absorbing compound, other detection methods needed to be investigated besides conventional UV-HPLC. LC-MS was found to be a well-suited analysis by searching for the EIC corresponding to the  $[M+H]^+$  ion. Good retention and peak shape were observed for this analyte using the Cogent Bidentate C18 2.0™ Column.



Metaldehyde

### Peak:

Metaldehyde 177.1121 m/z  $[M + H]^+$

### Method Conditions

**Column:** Cogent Bidentate C18 2.0™, 2.2 $\mu$ m, 120Å

**Catalog No.:** 40218-05P-2

**Dimensions:** 2.1 x 50 mm

#### Mobile Phase:

A: DI Water / 0.1% Formic Acid

B: Acetonitrile / 0.1% Formic Acid

Time (minutes)	%B
0	10

3	100
6	100
7	10

**Post Time:** 3 minutes

**Injection vol.:** 1 $\mu$ L

**Flow rate:** 0.4mL / minute

**Detection:** ESI - POS - Agilent 6210 MSD TOF Mass Spectrometer

**Sample:** Slug pellets (containing 3.25% Metaldehyde) were ground and 800mg was transferred to a 25mL volumetric flask. A portion of 50 / 50 Solvent A / Solvent B diluent was added and the flask was sonicated for 10 minutes. Then it was diluted to mark, mixed thoroughly, and filtered with a 0.45 $\mu$ m Nylon Syringe Filter (MicroSolv Tech Corp.).

**Note:** Metaldehyde is a cyclic tetramer of Acetaldehyde. Slug pellets contain wheat as bait with a small amount of Metaldehyde. These pellets are sold widely under a variety of trade names, such as Ariotox®, Cekumeta®, Deadline®, and others.



## Attachment

**No 317 Metaldehyde in Slug Pellets pdf** 0.2 Mb [Download File](#)

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