PRODUCT NOTE



Gas Chromatography/ Mass Spectrometry

Key Features:

- Ideal for sampling liquids and dissolved solid samples on site
- Versatile uses in public safety, forensic science, illicit drug screening, HAZMAT, military, environmental and food safety applications
- Simple sample collection to analysis in minutes

Custodion CME Syringes for Easy Liquid Sample Collection and Injection

Introduction

The Custodion® Coiled Microextraction (CME) syringe is a liquid sample collection and injection device used for in-field

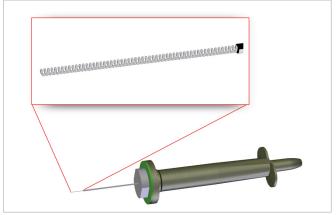
sampling and gas chromatographic (GC) injections. When used with the Torion® T-9 Portable GC/MS system, the Custodion-CME syringes are a quick, easy and reliable way to collect and analyze liquid samples in the field.

There has never been a convenient way to collect and analyze liquid samples in the field. Traditional GC/MS sample preparation techniques require sharp syringes, multiple solvents, and two-handed operations that complicate in-field analysis. Designed with field operators in mind, the Custodion-CME syringe eliminates the need for sharp needles when operating in hazardous environments requiring personal protective equipment (PPE). The single-handed operation and ease of using CME syringes are ideal for forensic evidence, explosives, and HAZMAT applications where time is critical.



Coiled Microextraction Technology

Coiled Microextraction (CME) is a novel technique that combines sample collection and injection into a single device for liquid and dissolved solid samples. The coiled wire within the Custodion-CME syringe consists of an inertium treated wire that is finely coiled to trap liquid samples, including those with suspended solids by capillary action. Once the solvent has dried, the dissolved compounds remain on the coiled wire ready for introduction into the heated injection port of the Torion T-9 Portable GC/MS for thermal desorption, separation, and detection.



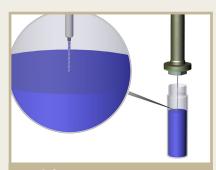
 $\it Figure~1.$ Custodion $^{\circ}$ Coiled Microextraction (CME) syringe with a retracted coiled wire.

Syringe Operation and Use

The Custodion® handle is made from hardened plastic for robust, durable operation. Its push-button trigger mechanism on top of the handle is easy to use, and extends the wire for sampling and sample injection or retracts the coil for protection between sampling and injection. The push-button is color-coded for easy viewing of the CME wire position. The CME syringe needle and wire containing the collected analytes can be protected during transport and storage using the unique screw-on/off cap. Custodion syringes are as easy to use as a ballpoint pen.

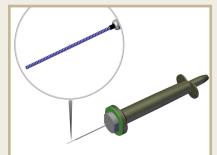
Ideal for Public Safety

In the field, first responders and field analysts tasked with screening potentially hazardous chemicals require a versatile toolkit to ensure public safety. The ability to safely collect a sample and provide actionable results in less than 10 minutes is of utmost importance. The combined aspects of a versatile sampling device, minimal user interaction, and on-site identification with a portable GC/MS are ideal for hazardous environments. Having both Custodion-CME and Custodion-SPME (Solid Phase Microextraction) syringes in a user's toolkit provides the flexibility needed to analyze gas, liquid and dissolved solid samples with the Torion T-9 Portable GC/MS.



Quick

The Custodion-CME syringe collects liquid and dissolved solid samples in seconds. The tightly bound coil traps the solution and target analytes through capillary action.



Easy

The Custodion-CME syringe is designed to collect a fixed volume that is dependent on the cohesive properties of the liquid. While the sample volume may vary between different sample types, there is minimum variation between similar samples.



Reliable

The Custodion-CME syringe allows you to consistently collect target analytes from liquid and dissolved samples in any location. Once target compounds are dried on the wire, they are protected by the syringe needle and cap ensuring sample integrity for confident analysis in the field.

Product Specifications:	
Syringe Length	7.2 in or 18.3 cm
Hand Grip Length	4.0 in or 10.2 cm
Diameter	1.375 in or 3.5 cm (widest)
Weight	1.8 ounces (50 grams)
Coiled Wire Length	0.4 in or 1.0 cm
Syringe Barrel Gauge	19 gauge
Sample Volume	Sample volume varies depending on the sample's liquid cohesion properties.



