# **MDA Scientific Chemcassette®**

# Honeywell





Frequently asked questions about Chemcassette<sup>®</sup> toxic gas detection

### Q. What is a Chemcassette<sup>®</sup>?

"Chemcassette<sup>®</sup>" is the unique trademarked name for a calibration free toxic gas detection method that uses an optical scanning system to detect the presence of gas by a color change on the specially chemically impregnated paper tape. Chemcassette<sup>®</sup> technology is highly specific and reacts extremely fast to the presence of parts per billion (ppb) levels of many hazardous gases. Over 200,000 points of gas detection are currently maintained by the Chemcassette<sup>®</sup> sensing technology at any given time around the world in some of the most critical safety applications possible.

### Q. Where can I buy Chemcassette® product?

Only Honeywell Analytics' authorized sales and service representatives can supply the unique Chemcassette® product line. Only Honeywell Analytics designs, manufactures, sells and supports Chemcassette® products.

## Q. What support do I get when I buy a unique Chemcassette<sup>®</sup> product?

Each MDA Scientific Chemcassette® is manufactured to traceable ISO 9000 manufacturing standards by a world class team of highly trained chemists and each batch is calibrated with ultra pure gas that is traceable to nationally accepted standards. This means that the end user does not have to provide calibration facilities themselves thereby saving cost and reducing risks to their own staff. Efficient high volume manufacturing techniques means that there is always available Chemcassette® in stock that can be shipped anywhere in the world so that our customers are never left without adequate safety cover. Application support with expert gas detection chemists is available by phone and e-mail and is supported with many years of technical application notes and help to diagnose common support issues. Should there be any concern regarding the performance of an individual Chemcassette®, a free of charge evaluation will be performed to trouble shoot the observed scenario using the award winning quality management system "Customer Discrepancy Report" CDR. Every CDR completed

by a customer is guaranteed a full response and the outcome is reported directly back to the end user to ensure a complete resolution process. Each Chemcassette<sup>®</sup> is backed with a full warranty and we have over 20 years of experience regarding the quality control of our proven sensing technology.

#### Q. What statistics prove the benefits of Chemcassette® technology?

Honeywell Analytics has been manufacturing their unique Chemcassette® sensor tapes for over 25 years and maintain traceable records on every production batch, every calibration and every instrument and calibration gas cylinder used to perform the calibration. Experienced scientists maintain a constant measurement environment when performing the calibrations and they are skilled at handling the very toxic gases used for testing and have double checks in place to confirm that the test gas is still within acceptable specification. Looking at just the data on just a single tape sample is not adequate proof that the detection principle is reliable and reproducible; it is essential that the sensing technology can be backed by many years of data that takes into account batch to batch variations and confirms that every single Chemcassette® will detect toxic gas as specified, every time!

## **Chemcassette**®



### Q. What makes Chemcassette<sup>®</sup> technology unique?

In general all the chemical methods are specially formulated and proven to work in the real end user environment with demanding applications associated with changes in the environmental conditions and potential cross interference sources. We are not satisfied with making controlled laboratory environment only tests; all our Chemcassette<sup>®</sup> tapes must be proven to work in real industrial applications and be scalable for high volume production chemistry runs to satisfy our global customer base. Our Chemcassette® formulations are coated on a unique paper medium that is exclusively available to Honeywell Analytics. The software algorithms that process the gas detection methods on the MDA Scientific range of toxic gas analyzers are the product of many years of chemistry and software development and are only guaranteed to work when using Chemcassette® products. In summary the Chemcassette® medium and the instrumentation and software that control the detection principle are uniquely integrated; any unauthorized change in one of these factors would represent an unsafe gas sampling scenario as it would be both untested and unsupported by Honeywell Analytics.

### Q. Is my original warranty still valid if I use other paper tape or consumable products on MDA Scientific Analyzers?

Honeywell Analytics can only support the warranty performance of both the MDA Scientific instrument and the Chemcassette® tapes so long as Honeywell Analytics approved parts and Chemcassette® tapes have been used and approved service interactions have been undertaken. Use of an unauthorized source of paper tape immediately voids the existing warranty on the MDA Scientific analyzer and Honeywell Analytics is not responsible or liable for any costs or damages caused by the use of inappropriate parts. Our customers' safety is imperative to Honeywell Analytics and we therefore recommend routine maintenance by approved service personnel to maintain the performance and warranty of their gas detection systems.

## Q. What if an incident prevented the supply of Chemcassette<sup>®</sup> from the factory?

Honeywell Analytics supports numerous industries that demand continuous supply of replacement Chemcassette® product; our customers could not maintain their own production processes without our guarantee of available supplies. To overcome any worst case scenario such as our factory being unable to manufacture new tapes (due to an accident affecting the building for example) we have a duplicate factory manufacturing Chemcassette® in Europe as well as the original manufacturing site in Illinois, USA. Both factories can supply in excess of our typical annual demand and operate to the same exacting standards, materials and ISO 9000 audited processes.



#### Interesting facts about Chemcassette® History

#### Accuracy & Reproducibility

Honeywell Analytics has manufactured Chemcassette® tape for the detection of Phosgene gas with a greater than 98% reproducibility for over 25 years. This equates to a length of Chemcassette® that could stretch to the Moon and back 16 times or wrap around the Earth's equator over 300 times!

#### History of Chemcassette®

A brief chronology of our developments with Chemcassette® demonstrates our long term commitment to supporting our customers and their life safety systems:

1972:	Developed the TDI (7000) Chemcassette® instrument	1988:	MDA Scientific acquired by Zellweger Analytics	1994:	CM4 four channel continuous monitor launched
1977:	Launch of Phosgene Chemcassette® tape	1992:	Sulfur Analyzers developed for process analysis (9600L 9600P)	2000:	Vertex 72 point continuous monitor launched
1981:	Launch of Hydrides Chemcassette® tape				
1983:	7100 and the LP extended lifetime Chemcassette®	1992:	Millionth tape produced and 1000 System 16 instruments shipped	2004:	Extended 3 month lifetime Chemcassette® tapes launched
1987:	System 16 multi point sequential analyzer launched	1993:	ISO 9000 approvals gained	2005:	Honeywell acquires Zellweger Analytics to form a leading sensor supply company

## **Honeywell Analytics Lines of Business**







### Commercial

Vulcain-brand gas detection from standalone units to fully engineered, multipoint systems, all offering cost-effective regulatory compliance

» Applications: parking structures, chillers, mechanical rooms, office towers, commercial buildings, shopping centers, swimming pools, golf courses, schools and universities, laboratories

### Industrial

Renowned Sieger and Manning gas detection systems with advanced electrochemical, infrared and open path sensing technologies

» Applications: oil and gas, cold storage, water/wastewater treatment, chemicals, engine rooms, plastics and fibers, agriculture, printing and light industrial



**High Tech/Government** 

detection instrumentation including infrared spectroscopy (MST) with no cross

interference, to Chemcassette paper-

detection down to parts per billion

» Applications: semiconductor

Europe, Middle East, Africa

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based solutions (MDA Scientific) offering

manufacturing and nanotechnology,

specialty chemicals industry, research

aerospace propulsion and safety,

laboratories, emergency response

A complete portfolio of gas and chemical

### Find out more

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### **Technical Services**

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### **Technical Services**

24/7 global network includes post-sales service and Systems Integration teams

- » Emergency call out, service contracts, on/off-site repair, training and commissioning
- » Complete range of spares, consumables and accessories

### Asia Pacific

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