# **User Notice**

MSA PrimaX P and Series 47K Catalytic Combustible Gas Sensors

October 27, 2021



**MSA Corporate Center** 

1000 Cranberry Woods Drive Cranberry Township, PA 16066 800.MSA.2222 www.MSAsafety.com

### **Dear MSA Fixed Gas Detection Customer,**

MSA is issuing this User Notice to inform you of updates to calibration guidance for our PrimaX P and Series 47K catalytic combustible gas sensors.

MSA has identified that exposure to polar solvents may reduce the response of the sensors to hydrogen and hydrocarbons. The reduction in response results in erroneously low readings for hydrogen and hydrocarbons. Calibration of the sensors with a surrogate gas will not detect the reduction in response.

MSA has not received any reports of injuries associated with this condition. However, we are advising customers to follow updated calibration guidance.

For customers using PrimaX P or Series 47K catalytic combustible gas sensors to detect hydrogen or hydrocarbons in an environment that may contain polar solvents:

- Perform all calibrations with your target gas. Do not use a surrogate gas for calibration.
- After exposure to polar solvents, the sensor has to be immediately calibrated / adjusted using the target gas, independent of the calibration interval. In the case of an adjustment the zero point and sensitivity of the sensor has to be rechecked again after 24 hours.

#### **Identifying Potentially Affected Product**

Part numbers of sensors that are covered by this User Notice appear in Appendix A. This applies to all sensors, regardless of manufacture date.

A list of examples of polar solvents appears in Appendix B. Note that this list is NOT a comprehensive list of all polar solvents and you must independently confirm whether the chemicals in your environment are polar solvents.

## **MSA Customer Service Contact Information:**

If you have any questions regarding this User Notice, please contact MSA Customer Service as follows:

Europe and United Kingdom – contact your local MSA Customer Service U.S., Canada, or U.S. Territories – +1-866-672-0005, ProductSafetyNotices@MSAsafety.com

We apologize for any inconveniences that this may cause; however, your safety and continued satisfaction with our products is important to us.



Nathan Andrulonis

Director, Product Safety

PS21015-02

Issued by:

**MSA Corporate Center** 

1000 Cranberry Woods Drive Cranberry Township, PA 16066 800.MSA.2222 www.MSAsafety.com



### **Appendix A – Affected Sensor Part Numbers**

Affected product can be identified by checking the sensor part number.

#### **MSA Corporate Center**

1000 Cranberry Woods Drive Cranberry Township, PA 16066 800.MSA.2222 www.MSAsafety.com

Part Number	Description	Part Number	Description
10048118	S47K-PRP, Sensor, V4A, M25x1,5	10147541	S47K-HT-PRP, Sens, V4A, M25, 2m, kal.
10048199	S47K-HT, Sensor, SST, 316, M25	10147542	S47K-HT-PRP, Sensor, V4A, 3/4"NPT, 2M
10048272	S47K-PRP, Sensor, V4A, 3/4"NPT	10177669	Sensor,PrimaX,combustible,assembled,BR
10048825	S47K-HT, Sensor, SST, 316, 3/4"NPT	10177759	PrimaX P, Combustible Sensor BR
10048853	CAPTEUR 47K PRP INOX M25 BOITIER EEXE	10185959	Sensor, brennb.Gase, PrimaX ATEX, mont.
10088789	S47K-PRP, Sensor, V4A, 3/4"NPT (DFT)	10194050	Sensor S47K-PRP, M25x1,5m CIS
10088790	S47K-PRP, Sensor, V4A, M25x1,5 (DFT)	10194058	Sensor S47K-PRP, NPTx1,5m CIS
10109151	PrimaX P, Combustible Sensor PRP	10194064	Sensor S47K-HT-PRP, M25x1,5m CIS
10112716	PrimaX, Comb. gas sensor, 100 %LEL, ATEX	10198085	S47K-PRP, Sensor, V4A, M25x1,5,CIS (DFT)
10112717	PrimaX, Comb. gas sensor, 100% LEL, UL	10198086	S47K-PRP, Sensor, V4A, 3/4"NPT,CIS (DFT)
10129275	PRIMAX EX-SENSOR UL	10185325- BRL	S47K-HT,SENSOR,PRP,M25X1,5M,10M CABO BR
10147537	S47K-HT-PRP, Sensor, V4A, M25x1,5, 2m	B0320049	410 SENSOR, ST.ST., PRP, M20

To determine the part number of your sensor, review the part number on the sensor label. The weather guard may need to be removed in order to view the label.





Figure 1 - Sensor Label Location

Sensor Part Number

INERIS 03 ATEX 0208 MSA Europe GmbH Schlüsselstr.12 8645 Rapperswil-Jon CH - Schweiz S47K-PRP 10048118 INERIS U3 ATEA U2U0
II 2G Ex db IIC T4/T6 Gb T4 -40°C≤Ta≤+90°C / T6-40°C≤Ta≤+40°C 10V/0,8A SN s-a-03/20-00001 II 2D Ex tb IIIB T85°C / T135°C Db IP6X T135°C -40°C≤Ta≤+90°C / T85°C -40°C≤Ta≤+40°C



### **MSA Corporate Center**

1000 Cranberry Woods Drive Cranberry Township, PA 16066 800.MSA.2222 www.MSAsafety.com

## Appendix B – List of Examples of Polar Solvents

Note that this list is not a comprehensive list of all polar solvents and you must independently confirm whether the chemicals in your environment are polar solvents.

Chemical Formula	Name
C <sub>3</sub> H <sub>6</sub> O	Acetone
C <sub>4</sub> H <sub>8</sub> O	2-Butanone
$C_2H_6O$	Ethanol
C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>	1-Ethoxy-2 Propanol
$C_4H_8O_2$	Ethyl acetate
C <sub>3</sub> H <sub>8</sub> O	1-Propanol
C <sub>3</sub> H <sub>8</sub> O	2-Propanol
C <sub>3</sub> H <sub>6</sub> O	Allyl Alcohol
C <sub>6</sub> H <sub>12</sub> O	i-Butyl acetate
C <sub>6</sub> H <sub>12</sub> O	n-Butyl acetate
C <sub>4</sub> H <sub>10</sub> O	Diethyl Ether
$C_2H_4O_2$	Acetic Acid
(CH <sub>3</sub> CO) <sub>2</sub> O	Acetic Anhydride
C <sub>2</sub> H <sub>4</sub> O	Ethylene oxide
CH <sub>4</sub> O	Methanol
C <sub>3</sub> H <sub>6</sub> O	Propylene oxide