Calibration Kits
For Calibrating Instruments and Sensors

MSA Calibration Kits, when used with the appropriate calibration gas, offer a quick, convenient, and economical method of checking the response of MSA gas sensors and gas detection instrumentation. There are eleven types of calibration kits available, and one is made to calibrate your particular MSA sensor or instrument. These calibration kits contain all the necessary calibration components to calibrate your MSA equipment. They are housed in a lightweight carrying case so that they can be easily carried to the job site or sensor location. MSA has a wide assortment of calibration gases available.

Ordering Information

A-CAL – [__ __] – [__] – [__ __ __ __ __ __ __ __ __] – [__ __] – [__] – [__ __ __ __ __ __ __ __ __]

1 2 3 4 5 6

1: Calibration Kit Number

*40 - Diffusion Ultima sensor for:
- Carbon Monoxide
- Oxygen
- Hydrogen sulfide
- Sulfur dioxide
- Nitric oxide
- Hydrogen cyanide
- Combustible gas

*41 - Diffusion Ultima sensors for:
- Chlorine
- Clorine dioxide
- Nitrogen dioxide
- Hydrogen cloride

42 - Pumped Ultima or RSS sensors for:
- Carbon Monoxide
- Oxygen
- Hydrogen sulfide
- Sulfur dioxide
- Nitric oxide
- Hydrogen cyanide
- Combustible gas

43 - Pumped Ultima or RSS sensors for:
- Chlorine
- Chlorine dioxide
- Nitrogen dioxide
- Hydrogen cloride

44 - Ultima, Auto-calibration

45 - Diffusion sensors or Toxgard, Vantage Point for:
- Carbon Monoxide
- Oxygen
- Hydrogen sulfide
- Nitrogen dioxide
- Nitric oxide

46 - Diffusion combustible (non Ultima) sensors

47 - Diffusion sensors or Toxgard for:
- Chlorine
- Sulfur dioxide
- Hydrogen chloride
- Nitrogen dioxide

48 - Pumped Toxgard for:
- Chlorine
- Sulfur dioxide
- Hydrogen cyanide

49 - TGM Monitors or Chillgard TGM for:
- Carbon monoxide
- R-11
- R-22
- R-134A

50 - Chillgard RT or Model 3800

51 - Model 3600 or Model 3630 for:
- Carbon Dioxide or all Remote Sensors (F Regulator)

*For Remote Sensors use Kit 51

2: Regulator
- Kit 40 - F
- Kit 41 - E
- Kit 42 - H
- Kit 43 - H
- Kit 44 - I
- Kit 45 - E
- Kit 46 - E
- Kit 47 - E
- Kit 48 - H
- Kit 49 - E
- Kit 50 - F or G or H
- Kit 51 - F or G or H

Regulator types:
- E- 0.25 LPM
- F- 1.50 LPM
- G- Demand Regulator
- H- Matched Flow
- I- Constant Pressure

3: Calibration Gas Cylinder
000000 - None Required or see reverse side

4: 2nd Calibration
00 - None Required or choose number from 1

5: 2nd Regulator
0 - None Required or choose number from 2

6: 2nd Calibration Gas Cylinder
000000 - None Required or see reverse side

Diffusion Ultima Kit No. 40

Pumped Ultima Kit No. 42

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Calibration Gases, RP Type

Part Number	Chemical Name	Concentration	Description	Shelf LIfe Months	Calibration Minutes @1.5LPM
710882	CO	60ppm	Carbon Monoxide in Air		65
10027938	CO	300ppm	Carbon Monoxide in Air		65
479266	CO2	2000ppm	Carbon Dioxide in Air		65
479265	CO2	2.50%	Carbon Dioxide in Air		65
801047	CO2, CH4	6.6%, 2.5%	Carbon Dioxide, Methane in Nitrogen		65
801043	CO2, CH4	3300ppm, 2.5%	Carbon Dioxide, Methane in Nitrogen		65
801045	CO2, CH4	1.3%, 2.5%	Carbon Dioxide, Methane in Nitrogen		65
801041	CO2, CH4	1300ppm, 2.5%	Carbon Dioxide, Methane in Nitrogen		65
801044	CO2, CH4	6600ppm, 2.5%	Carbon Dioxide, Methane in Nitrogen		65
801046	CO2, CH4	3.3%, 2.5%	Carbon Dioxide, Methane in Nitrogen		65
801042	CO2, CH4	2000ppm, 2.5%	Carbon Dioxide, Methane in Nitrogen		65
801048	CO2, CH4	33.3%, 2.5%	Carbon Dioxide, Methane in Nitrogen		65
804770	CO, CH4, O2, H2S	300ppm, 1.45%, 15%, 10 ppm	Carbon Monoxide, Methane, Oxygen, , H2S in N2	9	38.5
710331*	CL2	2ppm	Chlorine in Nitrogen	4	38.5
10028066*+	CL2	10ppm	Chlorine in Nitrogen	4	38.5
710331*	CLO2	2ppm	Chlorine in Nitrogen (substitute for CLO2)	4	38.5
803499	R-11	100ppm	R-11 in Nitrogen		65
710880‡	R-11	990ppm	R-11 in Nitrogen		65
804866	R-12	100ppm	R-12 in Nitrogen		65
710878‡	R-12	990ppm	R-12 in Nitrogen		65
804870	R-113	100ppm	R-113 in Nitrogen		65
812784	R-123	30ppm	R-123 in Nitrogen		65
803498	R-123	100ppm	R-123 in Nitrogen		65
803500	R-134A	100ppm	R-134A in Nitrogen		65
710874‡	R-134A	990ppm	R-134A in Nitrogen		65
804868	R-22	100ppm	R-22 in Nitrogen		65
710876‡	R-22	990ppm	R-22 in Nitrogen		6
10028078	HCL	40ppm	Hydrogen Chloride in Nitrogen	6	38.5
10028072	HCN	10ppm	Hydrogen Cyanide in Nitrogen	4	65
10028046	H2	0.8%	Hydrogen in Air		65
710414*	H2S	5ppm	Hydrogen Sulfide in Nitrogen	9	38.5
10028060*+	H2S	10ppm	Hydrogen Sulfide in Nitrogen	9	38.5
10028062*	H2S	40ppm	Hydrogen Sulfide in Nitrogen	9	38.5
10028064*+	H2S	15ppm	Hydrogen Sulfide in Nitrogen	9	38.5
10028038	Isobutylene	100ppm	Isobutylene in Air	9	65
10028032	CH4	2.5%	Methane in Air		65
801049	CH4	6.6%	Methane in Nitrogen		65
10028022	CH4,O2	1.45%,15%	Methane, Oxygen in Nitrogen		65
10028020	CH4, O2, CO	1.45%, 15%, 60ppm	Methane, Oxygen, Carbon Monoxide in Nitrogen		65
10028058*	CH4, O2, H2S	1.45%, 15%, 10ppm	Methane, Oxygen, Hydrogen Sulfide in Nitrogen	9	38.5
481317v	N2	99.90%	Nitrogen		65
10028074*	NO	50ppm	Nitric Oxide in Nitrogen	4	38.5
710332*	NO2	5ppm	Nitrogen Dioxide in Air	4	38.5
10028068*	NO2	10ppm	Nitrogen Dioxide in Air	4	38.5
493580	O2	5%	Oxygen in Nitrogen		65
479857	O2	20.80%	Oxygen in Nitrogen, Zero Air except for 3600, 3630, and Chillgard RT		65
10028076*	NH3	25ppm	Ammonia in Nitrogen	4	38.5
804532@	Pentane	0.75%	Pentane in Air, Substitute for Ammonia		65
10028034	C3H8 (Propane)	0.60%	Propane in Air		65
10028044	C3H8, O2, CO	0.6%, 15%, 60ppm	Propane, Oxygen, Carbon Monoxide in Nitrogen		65
10028070*	SO2	10ppm	Sulfur Dioxide in Air	9	38.5
10028028	Zero Air	20.8% Oxygen in Nitrogen	Zero Air		65
10028042	Zero Air	20.8% Oxygen in Nitrogen	Zero Air for Chillgard RT Only		65

*Note: All cylinders contain 98 liters at 1000 psi except those indicated by an *. They have 58 liters. 98 Liters gives approximately 20 calibrations per cylinder.
+Not to be used for Ultima sensors.
@Used only for Chillgard RT, substitute for ammonia.
vUsed as zero air for O2, Cl2, ClO2 Ultima sensors and all infrared instruments.
‡Used for ChillGard TGM only.

Note: This Data Sheet contains only a general description of Calibration Kits by MSA. While uses and performance capabilities are described, under no circumstances should the products be used except by qualified, trained personnel, and not until the instructions, labels or other literature accompanying the products have been carefully read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning these products.

In U.S, 1-800-MSA-INST or FAX (724) 776-3280
In Canada, 1-800-MSA-INST or FAX (905) 238-4155
Elsewhere, MSA International, (412) 967-3228 or FAX (412) 967-3373

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