



**Our professional sales staff is experienced in developing specifications and recommending product solutions. We produce a wide variety of products affording our customers many options for meeting their labeling requirements. As an installation contractor we offer professional installation services and a single source of accountability from materials selection through installation. Our customers count on MSI for high-quality products, professional installation services and prompt delivery worldwide.**

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**TERMS OF SALE:**

Net 30 Days F.O.B. Milwaukee, WI

**CREDIT TERMS:**

All orders are subject to acceptance of Marking Services, Inc. Customers with established credit or well-rated by Dun & Bradstreet are normally on open account. First-time customers are requested to send a bank statement and three references along with the first order, or send a check, or accept C.O.D. shipment, or use your Mastercard, Visa, American Express or Discover.

**RETURN POLICY:**

Full packages of stock products in resalable condition will be accepted for return within thirty days from date of invoice. All returns must be shipped freight-paid after receipt of written authorization. A 15% restocking charge may apply. Returns of custom and one-of-a-kind printed products will not be accepted.

**WARRANTY STATEMENT:**

Marking Services, Inc. warrants, for a period of one year, that its products are free from defects in material and workmanship. Marking Services, Inc.'s obligation under this warranty is limited to replacement of the product if Marking Services, Inc.'s examination shall disclose to its satisfaction to have been defective at the time of sale. This is Marking Services, Inc.'s sole warranty. This warranty does not extend to any person or persons acquiring the product from the home buyer. MARKING SERVICES, INC. MAKES NO OTHER WARRANTIES OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATION ARE HEREBY DISCLAIMED BY MARKING SERVICES, INC. Under no circumstances shall Marking Services, Inc. be liable for any loss, damage, cost of repair or consequential damages of any kind in connection with the sale, use or repair of any product purchased from the company.

# Pipe and Valve Identification



**MARKING SERVICES INCORPORATED**

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MSI products provide highly visible information that clearly communicates the origin, destination and contents of piping systems, identifies location of valves and equipment and the presence of safety hazards. When properly installed, our products become an integral part of safe and efficient plant operations.

Our objective at Marking Services Incorporated is to raise the level of safety awareness by standardizing hazard identification and piping system layouts to better promote safe work conditions that minimize downtime due to errors or accidents. It's a comprehensive approach to mechanical identification that we back up with our long-standing commitment to innovative products, quality service and on-time delivery. And it's why we ask to be your pipe identification specialist.



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# Pipe Markers and Tapes



MSI offers three main choices of pipe marking materials, each designed for use in a specific environment.

## 1 MS-970 Coiled Plastic Markers:

Recommended for indoor use on dirty, oily or existing piping systems, especially where surface preparation for adhesive markers would require substantial labor costs. Coiled plastic markers are simply wound or snapped into place around piping, allowing for quick application without adhesives.

## 2 MS-900 Self-Adhesive Markers and Tapes:

Recommended for newly-installed piping in environments that are not exposed to sunlight or harsh environmental conditions. After the backing is removed, these markers simply may be applied directly to the pipe.

## 3 MS-995 Maxilar Markers:

Recommended for use in applications involving process chemicals, food processing, pharmaceuticals, water treatment facilities, and in marine and offshore environments. These markers are made of a Polyester/Tedlar material that offers proven durability on outdoor piping systems exposed to sunlight, chemicals or other harsh environmental conditions.

**Our pipe identification labels** provide a quick, accurate snapshot of critical information such as pipe content, flow direction, origin and destination. Proper pipe labeling eliminates the need to trace lines and promotes a greater understanding of piping layouts, translating to a quicker commissioning of a new building or facility upgrade. See page 24 for these customized labels.

# Pipe Markers

MS-970



Pipe diameter	Style marker	Marker width	Character height	Marker type
1/4" – 3/8"	TM	3"	1/4"	coil-on
1/2" – 1"	A	8"	1/2"	coil-on
1 1/8" – 2 1/4"	B	8"	3/4"	coil-on
2 3/8" – 3 1/4"	C	12"	1 1/4"	coil-on
3 3/8" – 4 1/2"	D	12"	1 1/4"	coil-on
4 5/8" – 5 7/8"	E	12"	1 1/4"	coil-on
6" – 7 7/8"	F	12"	1 1/4"	strap-on
8" – 10"	G	24"	2 1/2"	strap-on
over 10"	H	36"	3 1/2"	strap-on

Save installation time and cost

Coiled Markers provide the fastest, easiest method for installation of pipe markers.

## MS-970 Coiled Plastic Markers

For indoor environments where high heat and harsh chemicals are not present.

MS-970 coiled plastic pipe markers are constructed of 20 mil. vinyl, and are designed to identify piping in a wide variety of environments, especially in applications where the pipe surface is rough, oily, wet or rusty. They stay in place on pipes due to the memory of the coiling process, and therefore do not rely on adhesives.

No pipe surface preparation is required for application, so installation time is reduced. These markers wrap completely around the pipe [up to 6" diameter]. For pipes with a diameter of 6" or larger, a nylon strap-on version is provided. Flow direction arrows are included on all markers. Legends are sub-surface printed to protect them from environmental deterioration.

Complies with ASME A13.1 "Scheme for the Identification of Piping Systems" with regard to color, letter height and marker size.

PIPE DIAMETER	MARKER STYLE
1/4" – 3/8"	TM
1/2" – 1"	A
1 1/8" – 2 1/4"	B
2 3/8" – 3 1/4"	C
3 3/8" – 4 1/2"	D
4 5/8" – 5 7/8"	E
6" – 7 7/8"	F
8" – 10"	G
over 10"	H

Diameter includes insulation thickness



### TO ORDER

- 1] Submit a list of all markers needed. Specify legend and outside pipe diameter [include any insulation].
- 2] Determine the four-digit part number for each legend (from the list on the following page) along with the marker style letter indicating the pipe size. [Example: The marker "CHILLED WATER" for a 4" outside diameter pipe would have part number 9807-D]
- 3] Determine the price per marker by adding all stock markers together regardless of size.



### FEATURES

- Coiled construction quickly snaps around pipe
- Ideal for rusty, dirty or sweating pipes where adhesive markers cannot be used
- No pipe surface preparation needed
- Self-locking strip keeps marker in place even on vertical pipes
- Plastic nylon straps are included to secure marker in place on larger pipes (6" and larger)
- Can be removed and reused
- No minimum quantity is required on orders
- Service temperature range: -40° F to 160° F
- Flow direction arrows are printed on each marker
- Standard background colors: Yellow, Green, Red, Blue, White, Orange
- Standard copy colors: White, Black

## MS-970 Coiled Plastic Markers

Legend	Color	Part #
ACID	Yellow	9801
ACID VENT	Yellow	9778
ACID WASTE	Yellow	9779
AIR	Blue	9875
ALUM	Yellow	9876
AMMONIA	Yellow	9803
ARGON	Green	9804
ASBESTOS FREE INSULATION	Blue	9729
BOILER FEEDWATER	Yellow	9805
BOILER BLOWDOWN	Yellow	9812
BRINE	Yellow	9730
BYPASS	Yellow	9877
CAUSTIC	Yellow	9806
CARBON DIOXIDE	Yellow	9878
CHEMICAL FEED	Yellow	9879
CHILLED WATER	Green	9807
CHILLED WATER RETURN	Green	9808
CHILLED WATER SUPPLY	Green	9809
CHLORINE	Yellow	9810
CHLORINE SOLUTION	Yellow	9731
CIRCULATING WATER	Green	9811
CITY WATER	Green	9813
COLD WATER	Green	9814
COLD WATER RETURN	Green	9866
COLD WATER SUPPLY	Green	9867
COMPRESSED AIR	Yellow	9815
COMPRESSED AIR	Blue	9732
CONDENSATE	Yellow	9816
CONDENSATE DRAIN	Yellow	9880
LO PRESS CONDENSATE	Yellow	9838
MED PRESS CONDENSATE	Yellow	9881
HI PRESS CONDENSATE	Yellow	9834
CONDENSATE RETURN	Yellow	9817
CONDENSATE SUPPLY	Yellow	9818
CONDENSER WATER	Green	9819
CONDENSER WATER RETURN	Green	9864
CONDENSER WATER SUPPLY	Green	9883
COOLING WATER	Green	9820
COOLING WATER RETURN	Green	9882
COOLING WATER SUPPLY	Green	9865
DEIONIZED WATER	Green	9821
DOMESTIC COLD WATER	Green	9822
DOMESTIC COLD WATER RETURN	Green	9770
DOMESTIC COLD WATER SUPPLY	Green	9771
DOMESTIC HOT WATER	Yellow	9823
DOMESTIC HOT WATER RECIRC	Yellow	9733
DOMESTIC HOT WATER RETURN	Yellow	9884
DRAIN	Green	9824
DRAIN	Yellow	9734
DRINKING WATER	Green	9735
DUAL TEMP RETURN	Yellow	9772
DUAL TEMP SUPPLY	Yellow	9773
EXHAUST	Yellow	9825
FILTERED WATER	Green	9885
FIRE PROTECTION WATER	Red	9826
FIRE SPRINKLER WATER	Red	9736
FREON	Green	9827
FUEL GAS	Yellow	9886

Legend	Color	Part #
FUEL OIL	Yellow	9828
FUEL OIL RETURN	Yellow	9737
FUEL OIL SUPPLY	Yellow	9738
GAS	Yellow	9774
GLYCOL RETURN	Yellow	9774
GLYCOL SUPPLY	Yellow	9775
HEATING HOT WATER RETURN	Yellow	9869
HEATING HOT WATER SUPPLY	Yellow	9870
HEATING RETURN	Yellow	9832
HEATING SUPPLY	Yellow	9833
HEATING WATER RETURN	Yellow	9887
HEATING WATER SUPPLY	Yellow	9888
HI PRESS CONDENSATE	Yellow	9834
HI PRESS GAS	Yellow	9871
HI PRESS STEAM	Yellow	9835
HOT WATER	Yellow	9836
HOT WATER RETURN	Yellow	9861
HOT WATER SUPPLY	Yellow	9862
HYDRAULIC OIL	Yellow	9889
HYDROCHLORIC ACID	Yellow	9739
HYDROGEN	Yellow	9890
INDUSTRIAL COLD WATER	Green	9891
INDUSTRIAL HOT WATER	Yellow	9740
INSTRUMENT AIR	Blue	9892
LAB AIR	Yellow	9893
LAB VACUUM	Yellow	9894
LAB WASTE	Yellow	9895
LO PRESS CONDENSATE	Yellow	9838
LO PRESS STEAM	Yellow	9839
LUBE OIL	Yellow	9896
MAKE UP WATER	Green	9840
MED PRESS CONDENSATE	Yellow	9881
MED PRESS STEAM	Yellow	9841
MEDICAL AIR	Yellow	9897
MEDICAL VACUUM	White	9753
METHANOL	Yellow	9898
MILL AIR	Blue	9727
MILL WATER	Green	9728
NATURAL GAS	Yellow	9842
NITROGEN	Blue	9741
NITROGEN OXIDE	Blue	9754
NON-POTABLE WATER	Yellow	9844
OIL	Yellow	9845
OVERFLOW	Yellow	9899
OXYGEN	Green	9701
OXYGEN	Yellow	9846
PLANT AIR	Green	9847
PLANT WATER	Green	9702
POLYMER	Yellow	9742
POLYMER SOLUTION	Yellow	9743
POTABLE WATER	Green	9848
PROCESS WATER RETURN	Green	9703
PROCESS WATER SUPPLY	Green	9704
PROPANE	Yellow	9849
PUMPED CONDENSATE	Yellow	9705
RAW WATER	Green	9850
REFRIGERANT LIQUID	Yellow	9706
REFRIGERANT SUCTION	Yellow	9707

## Pipe Markers

### Custom MS-970



Pipe Diameter	Marker Style	Pipe Diameter	Marker Style
1/4" - 3/8"	TM	4 5/8" - 5 7/8"	E
1/2" - 1"	A	6" - 7 7/8"	F
1 1/8" - 2 1/4"	B	8" - 10"	G
2 3/8" - 3 1/4"	C	over 10"	H
3 3/8" - 4 1/2"	D		

For pipes with a 6" diameter or larger, use nylon straps to secure the plastic marker around the pipe (straps included)

## Customized MS-970 Coiled Plastic Markers

Let MSI customize your MS-970 markers to your exact needs. It's fast, easy and economical. Most orders ship in 24 to 48 hours.

- No setup charges
- No minimum order quantity
- Include any combination of the following items to make up the marker legend:
  - Pipe contents
  - Origin [from] and Destination [to]
  - Line numbers
  - Equipment numbers
  - Flow direction
- Standard background colors: White, Yellow, Green, Blue, Red, Orange, Purple, Brown and Black
- Standard text colors: Black and White
- Custom colors available

### TO ORDER

- 1] Submit a list of all markers needed. Specify legends, colors, quantities and styles.
- 2] Custom markers ship in 1-2 days
- 3] No minimum quantity required

# Pipe Markers

## MS-900

**WATER RETURN**  
**INSTRUMENT**

### For line service identification and system color coding

- Complies with the ASME A13.1 "Scheme for the Identification of Piping Systems" regarding color, label size and letter size
- Printed on premium-quality, fade-resistant vinyl
- Adheres well to pipe and insulation with only limited surface preparation
- Legend markers can be used with arrow tape or separate arrow markers to indicate flow direction (see page 11 for arrow tape)
- Fast, 24-hour turnaround on stock and custom legends

Marker style	Pipe Diameter (includes insulation)	Marker Size	Letter Size
A	3/4" - 2 1/4"	1" x 8"	3/4"
B	2 1/2" - 7 7/8"	2 1/4" x 13"	1 3/4"
C	8" - 10"	4" x 24"	2 1/2"
D	Over 10"	4" x 32"	3 1/2"

## MS-900 Self-Adhesive Pipe Markers

Legend	Color	Style A	B	C	D
2 PSI GAS	Yellow	91100	92100		
2 PSI NATURAL GAS	Yellow	91545	92545		
ACETYLENE GAS	Yellow	91101	92101		
ACID	Yellow	91102	92102		
ACID VENT	Yellow	91400	92400		
ACID WASTE	Yellow	91322	92322		
AIR	Yellow	91103	92103		
AIR	Blue	91211	92211		
AMMONIA	Yellow	91105	92105		
ARGON	Green	91106	92100	92100	92100
ARROWS*	Yellow	91208	92208	93208	94208
ARROWS*	Green	91209	92209	93209	94209
ARROWS*	Red	91210	92212	93210	94210
ARROWS*	Blue	91212	92212	93212	94212
ASBESTOS FREE INSULATION	Blue	91107	92107		
BOILER BLOWDOWN	Yellow	91108	92108		
BOILER FEED	Yellow	91109	92109		
BOILER FEEDWATER	Yellow	91110	92110		
BREATHING AIR	Blue	91401	92401		
CARBON DIOXIDE	Yellow	91111	92111		
CARBON DIOXIDE	Grey	91112	92112		
CAUSTIC	Yellow	91113	92113		
CHEMICAL FEED	Yellow	91213	92213		
CHILLED WATER	Green	91114	92114	93114	94114
CHILLED WATER RETURN	Green	91115	92115	93115	94115
CHILLED WATER SUPPLY	Green	91116	92116	93116	94116
CHLORINE	Yellow	91117	92117	93117	94117
CHLORINE SOLUTION	Yellow	91402	92402		
CIRCULATING WATER	Green	91118	92118		
CITY WATER	Green	91119	92119		
CLEAN DRY AIR	Blue	91403	92403		
COLD WATER	Green	91120	92120		
COLD WATER RETURN	Green	91121	92121		
COLD WATER SUPPLY	Green	91122	92122		
COMPRESSED AIR	Yellow	91123	92123		
COMPRESSED AIR	Blue	91284	92284		
CONDENSATE	Yellow	91124	92124		
CONDENSATE DRAIN	Yellow	91285	92285		
CONDENSATE RETURN	Yellow	91125	92125		
CONDENSER WATER	Green	91128	92128		
CONDENSER WATER RETURN	Green	91129	92129		
CONDENSER WATER SUPPLY	Green	91130	92130		
COOLING WATER	Green	91131	92131	93131	
COOLING WATER RETURN	Green	91286	92286		
COOLING WATER SUPPLY	Green	91287	92287		
DEIONIZED WATER	Green	91132	92132		
DEMINERALIZED WATER	Green	91214	92214		
DIESEL	Yellow	91304	92304		
DISCHARGE	Yellow	91134	92134		
DOMESTIC COLD WATER	Green	91136	92136	93136	
DOMESTIC HOT WATER	Yellow	91135	92135	93135	
DOM. HOT WATER RECIRC	Yellow	91314	92134		
DOM. HOT WATER RETURN	Yellow	91288	92288		
DOM. HOT WATER SUPPLY	Yellow	91423	92423		
DOMESTIC WATER	Green	91325	92325		
DRAIN	Green	91137	92137	93137	
DRAIN	Yellow	91215	92215	93215	
DUAL TEMP RETURN	Yellow	91289	92289		
DUAL TEMP SUPPLY	Yellow	91290	92290		
EVACUATION VACUUM	Yellow	91404	92404		
EXHAUST	Yellow	91139	92139		
EXHAUST AIR	Yellow	91326	92326		
FEEDWATER	Yellow	91140	92140		
FILTERED WATER	Green	91253	92253		

**TO ORDER** Specify part number and quantity of markers required.

Combine total quantity of stock markers of all styles for best price.

All markers are individual pieces.

Legend	Color	Style A	B	C	D
FIRE PROTECTION WATER	Red	91142	92142		
FIRE SPRINKLER WATER	Red	91143	92143		
FREON	Green	91144	92144		
FUEL GAS	Yellow	91145	92145		
FUEL OIL	Yellow	91146	92146		
FUEL OIL RETURN	Yellow	91332	92332		
FUEL OIL SUPPLY	Yellow	91333	93333		
GAS	Yellow	91147	92147		
GASOLINE	Yellow	91148	92148		
GLYCOL	Yellow	91149	92149		
GLYCOL RETURN	Yellow	91315	92315		
GLYCOL SUPPLY	Yellow	91316	92316		
HALON	Red	91150	92150		
HEATING	Yellow	91151	92151		
HEATING HOT WATER RET	Yellow	91291	92291		
HEATING HOT WATER SUP	Yellow	91292	92292		
HEATING RETURN	Yellow	91152	92152		
HEATING SUPPLY	Yellow	91153	92153		
HEATING WATER RETURN	Yellow	91293	92293		
HEATING WATER SUPPLY	Yellow	91294	92294		
HI PRESS AIR	Yellow	91154	92154		
HI PRESS AIR	Blue	91218	92218		
HI PRESS CONDENSATE	Yellow	91126	92126	93126	94126
HI PRESS GAS	Yellow	91155	92155		
HI PRESS STEAM	Yellow	91156	92156	93156	94156
HOT GAS	Yellow	91327	92317		
HOT WATER	Yellow	91157	92157	93157	
HOT WATER RETURN	Yellow	91158	92158	93158	
HOT WATER SUPPLY	Yellow	91159	92159	93159	
120 HOT WATER	Yellow	91425	92425		
140 HOT WATER	Yellow	91426	92426		
160 HOT WATER	Yellow	91427	92427		
HOUSE VACUUM	Yellow	91405	92405	93405	
HYDRAULIC FLUID	Yellow	91257	92257		
HYDROCHLORIC ACID	Yellow	91160	92160		
HYDROGEN	Yellow	91161	92161		
HYDROGEN PEROXIDE	Yellow	91305	92305		
HYDROGEN SULFIDE	Yellow	91306	92306		
INDUSTRIAL COLD WATER	Green	91295	92295		
INDUSTRIAL HOT WATER	Yellow	91296	92296		
INDUSTRIAL WASTE	Yellow	91328	92328		
INSTRUMENT AIR	Green	91162	92162		
INSTRUMENT AIR	Blue	91219	92219		
INSTRUMENT NITROGEN	Blue	91406	92406		
LO PRESS AIR	Green	91163	92163		
LO PRESS CONDENSATE	Yellow	91127	92127	93127	94127
LO PRESS GAS	Yellow	91164	92164		
LO PRESS STEAM	Yellow	91165	92165	93165	94165
LUBE OIL	Yellow	91166	92166		
LUBE OIL RETURN	Yellow	91407	92407		
LUBE OIL SUPPLY	Yellow	91408	92408		
MAKE UP WATER	Green	91167	92167		
MED PRESS CONDENSATE	Yellow	91409	92409	93409	94409
MED PRESS STEAM	Yellow	91189	92189	93189	94189
MEDICAL AIR	Yellow	91410	92410		
MEDICAL VACUUM	White	91411	92411		
MILL AIR	Blue	91260	92260	93260	
MILL WATER	Green	91261	92261	93261	94261
MILL WATER	Green	91261	92261	93261	94261
NATURAL GAS	Yellow	91168	92168	93168	
NITROGEN	Black	91169	92169		
NITROGEN	Blue	91317	92317		
NITROUS OXIDE	Blue	91412	92412		
NON POTABLE WATER	Yellow	91170	92170		

Legend	Color	Style A	B	C	D
OIL	Blue	91171	92171		
OIL FREE AIR	Blue	91413	92413		
OUTSIDE AIR	Blue	91329	92329	93329	
OXYGEN	Yellow	91172	92172		
OXYGEN	Green	91330	92330		
PLANT AIR	Green	91173	92173		
PLANT WATER	Green	91174	92174		
POTABLE WATER	Green	91175	92175		
POTABLE COLD WATER	Green	91414	92414		
POTABLE HOT WATER	Yellow	91415	92415		
PROCESS WATER	Yellow	91176	92176		
PROCESS WATER	Green	91220	92220		
PROCESS COOL WAT RET	Green	91416	92416	93416	94416
PROCESS COOL WAT SUP	Green	91417	92417	93417	94417
PROCESS VACUUM	Yellow	91418	92418		
PROPANE GAS	Yellow	91177	92177		
PUMPED CONDENSATE	Yellow	91297	92297		
RAINWATER	Green	91419	92419		
RAW WATER	Green	91178	92178	93178	94178
RECIRCULATING HOT WATER	Yellow	91424	92424		
REFRIGERANT	Yellow	91179	92179		
REFRIGERANT LIQUID	Yellow	91180	92180		
REFRIGERANT SUCTION	Yellow	91181	92181		
RELIEF AIR	Blue	91281	92281	93281	
RETURN AIR	Blue	91282	92282	93282	
RETURN	Yellow	91182	92182	93182	
RETURN	Green	91183	92183	93183	
ROOF DRAIN	Green	91184	92184	93184	
SANITARY DRAIN	Green	91236	92236	93236	
SANITARY SEWER	Green	91185	92185	93185	
SANITARY VENT	Green	91318	92318	93318	
SANITARY WASTE	Green	91298	92298		
SEAL WATER	Green	91267	92267		
SERVICE AIR	Yellow	91221	92221		
SLUDGE	Yellow	91186	92186		
SODIUM HYDROXIDE	Yellow	91310	92310		
SOFT WATER	Green	91187	92187		
STEAM	Yellow	91188	92188		
STORM DRAIN	Green	91299	92299	93299	
STORM SEWER	Green	91300	92300	93300	
STORM WATER	Green	91301	92301	93301	
SUCTION	Yellow	91190	92190		
SULFURIC ACID	Yellow	91191	92191		
SUMP PUMP DISCHARGE	Yellow	91331	92331		
SUPPLY	Yellow	91192	92192	93192	
SUPPLY	Green	91193	92193	93193	
SUPPLY AIR	Blue	91283	92283	93283	
TEMPERED WATER	Yellow	91302	92302		
TOLUENE	Yellow	91194	92194		
TOWER WATER	Green	91195	92195	93195	
TOWER WATER RETURN	Green	91319	92319	93319	
TOWER WATER SUPPLY	Green	91320	92320	93320	
TREATED WATER	Green	91196	92196		
ULTRA PURE WATER	Green	91420	92420		
UTILITY NITROGEN	Green	91420	92420		
UTILITY WATER	Green	91422	92422		
VACUUM	Yellow	91198	92198		
VENT	Green	91199	92199	93199	
VENT	Yellow	91200	92200	93200	
WAGD	Purple	91432	92432		
WASTE	Yellow	91202	92202		
WASTE WATER	Yellow	91201	92201		
WATER	Green	91203	92203	93203	
WATER	Yellow	91204	92204	93204	
WELL WATER	Green	91321	92321		

See page 11 for MS-900 Flow Directional Arrow Tape

# Pipe Markers

## Custom MS-900

**DIGESTED SLUDGE**

**AHU-12**

**FIRE DAMPER**

**EXHAUST AIR**  
EF-1

Marker style	Pipe Diameter	Marker Size	Letter Size
A	¾" thru 2¼"	1" x 8"	¾"
B	2½" – 7⅞"	2¼" x 13"	1¾"
C	8" thru 10"	4" x 24"	2½"
D	over 10"	4" x 32"	3½"

**SUPPLY AIR**



**RETURN AIR**



**EXHAUST AIR**

Legend	Bkgd Color	2¼" x 13"	4" x 24"
EXHAUST AIR	Yellow	92326	93326
INTAKE AIR	Blue	92428	93428
OUTSIDE AIR	Blue	92329	93329
RELIEF AIR	Blue	92281	93281
RETURN AIR	Blue	92282	93282
RETURN AIR	Green	92430	93430
SUPPLY AIR	Blue	92283	93283
SUPPLY AIR	Green	92431	93431
ARROW	Yellow	92208	93208
ARROW	Green	92209	93209
ARROW	Blue	92212	93212

**TO ORDER CUSTOM MS-900 MARKERS:** Specify legend wording, style, colors and quantity of markers required. Combine total number of markers for best price.

**MS-900 DUCT MARKERS:** Specify the part number and quantity. Combine all legends for best pricing.

## Customized MS-900 Self-Adhesive Pipe Markers

We will design the markers that best meet your needs.

- Fast delivery; usually ships within 24 hours, complete and ready to install
- No set-up charges or minimum quantities requirement
- Colors available: White, Yellow, Green, Blue, Red, Orange, Brown, Black, Grey and Purple

## MS-900 Duct Markers

Use to identify the air flow and equipment in a Ductwork System.

- Highly-visible color-coded labels make it easy to differentiate between different systems
- Individual arrow markers designate direction of flow
- Markers can be customized to designate the specific system or equipment of origin
- Sized to meet ASME-A13.1 Standard

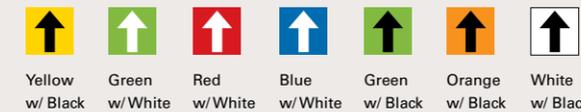
## Tapes

### MS-900 Flow Directional Arrow Tape

Designed to indicate direction of flow when used with MS-900 pipe markers.

- Standard roll sizes are 1", 2" & 4" wide by 30 yds long. Custom colors are also available. Call for a quote.
- Satisfies ASME A13.1 requirement to show flow direction

Size	Product codes for color combinations available						
<b>1" x 30yd.</b>	95101	95102	95103	95104	95105	95106	95107
<b>2" x 30yd.</b>	95201	95202	95203	95204	95205	95206	95207
<b>4" x 30yd.</b>	95401	95402	95403	95404	95405	95406	95407



### MS-900 Color Banding Tape

When Engineering Specifications or customer preference require pipe color coding, use MS-900 Color-Banding Tape.

- For color coding in high sunlight areas request UV-protective over-laminate to triple useful life
- Complies with MIL-SPEC 101B
- Standard sizes: 1" and 2" wide by 50 yds long
- Also available in 3", 4" and 6" rolls.

**TO ORDER** Select part number and quantity of rolls needed. Combine total number of rolls for best pricing.

	1" x 50yd.	2" x 50yd.
<b>Yellow</b>	95101	96201
<b>Green</b>	96102	96202
<b>Red</b>	96103	96203
<b>Blue</b>	96104	96204
<b>Brown</b>	96105	96205
<b>White</b>	96106	96206
<b>Black</b>	96107	96207
<b>Grey</b>	96108	96208
<b>Orange</b>	96109	96209
<b>Purple</b>	96110	96210

Custom colors available

Use the chart below to determine how many rolls of tape are required. It lists the amount of tape bands that can be cut from a roll for various pipe diameters.

Pipe Diameter	Tape Length	# Bands/Roll
2"	8" Band	135
4"	14" Band	77
6"	21" Band	51
8"	27" Band	40
10"	35" Band	30
12"	41" Band	26



# Pipe Markers

## MS-900



Legend	Background Color	Letter Color	Part Number
CARBON DIOXIDE	Grey	White	68501
CARBON DIOXIDE 50 PSI	Grey	White	68502
HELIUM	Brown	White	68503
LAB AIR	Yellow/White	Black	68518
LAB VAC	Black/White	Black	68519
MEDICAL AIR	Yellow	Black	68504
MEDICAL AIR 50 PSI	Yellow	Black	68512
MEDICAL EVAC	Purple	White	68510
MEDICAL VACUUM	White	Black	68506
NITROGEN	Black	White	68507
NITROGEN 160 PSI	Black	White	68514
NITROUS OXIDE	Blue	White	68508
NITROUS OXIDE 50 PSI	Blue	White	68516
OXYGEN	Green	White	68509
OXYGEN 50 PSI	Green	White	68517
WAGD	Purple	White	68511



Legend	Color	Part Number
ACETYLENE	Yellow	66501
ACID	Yellow	66502
AIR	Blue	66503
CAUSTIC	Yellow	66504
CHEMICAL FEED	Yellow	66505
CHLORINE	Yellow	66506
CHLORINE LIQUID	Yellow	66507
CHLORINE SOLUTION	Yellow	66508
CLEAN DRY AIR	Blue	66529
COMPRESSED AIR	Yellow	66509
DEIONIZED WATER	Green	66510
DEMINERALIZED WATER	Green	66511
DOMESTIC COLD WATER	Green	66512
DOMESTIC HOT WATER	Yellow	66513
EVACUATION VACUUM	Yellow	66514
GAS	Yellow	66528
HELIUM	Yellow	66527
HYDRAULIC OIL	Yellow	66515
HYDROGEN	Yellow	66516
INSTRUMENT AIR	Blue	66517
LAB AIR	Yellow	66519
LAB GAS	Yellow	66520
LAB VACUUM	Yellow	66521
LUBE OIL	Yellow	66522
NATURAL GAS	Yellow	66524
PLANT AIR	Blue	66518
SAMPLE	Yellow	66525
VACUUM	Yellow	66526
VENT	Yellow	66530

## MS-900 Medical Gas Markers

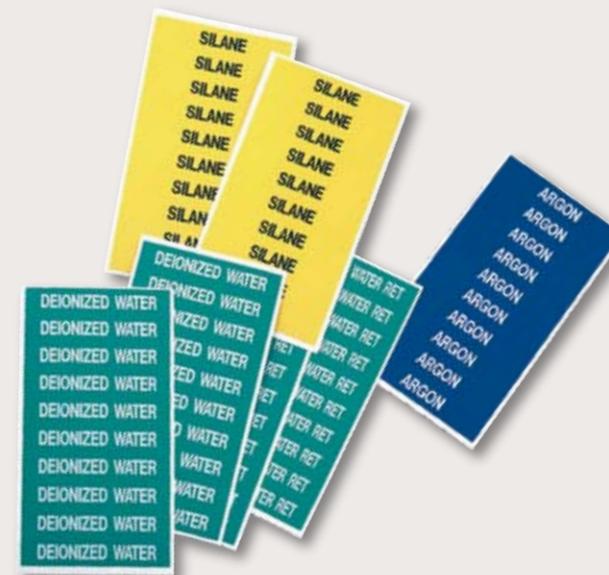
Manufactured per NFPA-99C; CGA C-9-2002  
 "Standard Industry Color Coding Recommendations  
 for Medical Gases."

- Clearly shows contents (legend) and flow direction on one pressure-sensitive marker for easy installation
- Letters are ¼" high
- Supplied in rolls of 100 labels or individual pieces
- Markers are 3"x 3" and wrap completely around the pipe

**TO ORDER** Specify the part number and quantity.

Combine total number of stock markers for best price.

For large quantities, please call for a quotation. For custom markers, specify the legend, color and quantity required.



## MS-900 Markers for Tubing & Small-Bore Piping

Identifies tubing or piping less than 1" in diameter.

- Color, legend and flow direction arrows combined on one pressure-sensitive marker
- Markers are 3"x 3" and wrap completely around the pipe for easy installation. Letters are ¼" high.
- Supplied in individual pieces, or rolls of 100 per roll – order the exact quantity of labels you need.

## MS-900 Mini-Markers

Use Style "T" mini-markers for labeling ¼" to ¾" process lines, tool connections or utility piping.

- Identify the piping carrying chemicals and gases used in the production of semi-conductors and components
- Easy-to-install, adhesive-backed, permanent markers
- Custom legends, chemical abbreviations and point of connection labels are available
- Style T markers are ½" x 2½" (10 labels per sheet)

Legend	Color	Part Number
ACETYLENE GAS	Yellow	95000
ACID	Yellow	95001
ACID WASTE DRAIN	Yellow	95002
AMMONIA	Yellow	95003
AMMONIA HYDROXIDE	Yellow	95004
ARGON	Blue	95073
ARROW	Yellow	95005
ARROW	Green	95006
ARROW	Blue	95007
ARROW	Red	95008
BORON TRICHLORIDE	Yellow	95009
BREATHING AIR	Blue	95010
CAUSTIC	Yellow	95011
CHEMICAL FEED	Yellow	95012
CHILLED WATER RETURN	Green	95013
CHILLED WATER SUPPLY	Green	95014
CHLORINE	Yellow	95015
CHLORINE SOLUTION	Yellow	95016
CITY WATER	Green	95017
CLEAN DRY AIR	Blue	95018
COMPRESSED AIR	Blue	95019
CORROSIVE VENT	Yellow	95020
DEIONIZED WATER	Green	95021
DEIONIZED WATER RETURN	Green	95022
DEIONIZED WATER SUPPLY	Green	95023
DEMINERALIZED WATER	Green	95024
DOMESTIC COLD WATER	Green	95025
DOMESTIC HOT WATER	Yellow	95026
ETHYLENE GLYCOL	Yellow	95027
EVACUATION VACUUM	Yellow	95028
FREON	Yellow	95029
GAS	Yellow	95030
HELIUM	Yellow	95031
HIGH PURITY NITROGEN	Yellow	95032
HYDRAULIC OIL	Yellow	95038
HYDROFLUORIC ACID	Yellow	95033
HYDROGEN	Yellow	95034
HYDROGEN BROMIDE	Yellow	95035
HYDROGEN CHLORIDE	Yellow	95036
HOUSE VACUUM	Yellow	95037
INDUSTRIAL COLD WATER	Green	95039
INDUSTRIAL HOT WATER	Yellow	95040
INSTRUMENT AIR	Blue	95041
INSTRUMENT NITROGEN	Blue	95042
ISOPROPYL ALCOHOL	Yellow	95043
LUBE OIL	Yellow	95044
METHANOL	Yellow	95045
NATURAL GAS	Yellow	95046
NITROGEN	Blue	95074
NITRIC ACID	Yellow	95047
NITROGEN TRIFLUORIDE	Yellow	95048
NITROUS OXIDE	Yellow	95049
OIL FREE AIR	Blue	95050
OXYGEN	Yellow	95051
OUTSIDE AIR	Blue	95052
OZONE	Yellow	95053
PHOSPHORIC ACID	Yellow	95054
PLANT AIR	Blue	95055
PROCESSED COOLING WATER RET	Green	95056
PROCESSED COOLING WATER SUP	Green	95057
PROCESSED EXHAUST	Yellow	95058
PROCESSED VACUUM	Yellow	95059
RO RETURN	Green	95060
RO SUPPLY	Green	95061
SILANE	Yellow	95063
SOLVENT RECLAIM	Yellow	95075
SOLVENT VENT	Yellow	95064
SULFUR HEXAFLUORIDE	Yellow	95065
SULFURIC ACID	Yellow	95066
ULTRA PURE NITROGEN	Blue	95072
ULTRA PURE WATER DI RET	Yellow	95076
ULTRA PURE WATER DI SUP	Yellow	95077
ULTRA PURE WATER RET	Green	95067
ULTRA PURE WATER SUP	Green	95068
UTILITY NITROGEN	Blue	95069
UTILITY WATER	Green	95070
VACUUM	Blue	95071
WATER	Green	95078

# Pipe Markers

## MS-900

Legend	Color	Part Number
ACID	Yellow	65101
AIR	Blue	65102
BOILER FEEDWATER	Yellow	65140
CHILLED WATER	Green	65106
CHILLED WATER RETURN	Green	65129
CHILLED WATER SUPPLY	Green	65130
CITY WATER	Green	65107
COLD WATER	Green	65108
COMPRESSED AIR	Blue	65109
CONDENSATE	Yellow	65110
CONDENSATE RETURN	Yellow	65141
CONDENSER WATER	Green	65111
CONDENSER WATER RETURN	Green	65142
CONDENSER WATER SUPPLY	Green	65143
DEIONIZED WATER	Green	65144
DOMESTIC COLD WATER	Green	65131
DOMESTIC HOT WATER	Yellow	65132
DRAIN	Green	65112
EXHAUST AIR	Yellow	65160
FIRE PROTECTION WATER	Red	65113
FUEL OIL	Yellow	65145
GAS	Yellow	65114
GLYCOL	Yellow	65146
HEATING	Yellow	65115
HEATING RETURN	Yellow	65133
HEATING SUPPLY	Yellow	65134
HEATING WATER RETURN	Yellow	65156
HEATING WATER SUPPLY	Yellow	65157
HI PRESS CONDENSATE	Yellow	65147
HI PRESS STEAM	Yellow	65148
HOT WATER	Yellow	65135
HOT WATER RETURN	Yellow	65136
HOT WATER SUPPLY	Yellow	65136
INTAKE AIR	Blue	65161
LO PRESS CONDENSATE	Yellow	65149
LO PRESS STEAM	Yellow	65150
NATURAL GAS	Yellow	65116
NITROGEN	Green	65151
NON POTABLE WATER	Yellow	65138
OIL	Yellow	65117
OUTSIDE AIR	Blue	65162
OXYGEN	Yellow	65118
POTABLE WATER	Green	65119
RECIRCULATING HOT WATER	Yellow	65159
RELIEF AIR	Blue	65163
RETURN	Yellow	65164
RETURN	Green	65165
RETURN AIR	Blue	65164
ROOD DRAIN	Green	65152
SANITARY DRAIN	Green	65158
SANITARY SEWER	Green	65153
SPRINKLER WATER	Red	65122
STEAM	Yellow	65123
SUPPLY	Yellow	65124
SUPPLY	Green	65125
SUPPLY AIR	Blue	65165
VACCUM	Yellow	65126
WASTEWATER	Yellow	65154
WATER	Green	65128

**TO ORDER** Specify the part number and quantity. Combine total number of stock rolls for best price. For custom labels specify the legend, color and quantity of rolls needed.



### MS-900 Economy Pipe Markers

- Each economy MS-900 adhesive marker is supplied in rolls of 50 identical markers and flow directional arrows
- Markers are 2" x 9" and the directional arrows are 2" x 4½". Letter/arrow height is 1¼"
- Perforations between markers ensure easy handling and application
- Use separately or with color banding tape for a complete low-cost marking system [See page 11]

Note: This product does not meet ASME A13.1-1996 Standard regarding marker size and letter height



### MS-900 Adhesive Roll Markers

Convenient "one-size-fits-all". MS-900 roll markers wrap around all diameters of pipe.

- Easy-to-use adhesive markers wrap around any size pipe. Simply peel the liner from the label and adhere the marker around the pipe.
- Rolls are 6½" wide and can be cut to the length needed to fit around the pipe
- Letters are 1¼" in height. Legends and flow arrows are printed every six inches.
- Roll size 6½" x 30'
- Legend is repeated 60 times per roll

Note: Longer legends are abbreviated to fit available space. This product does not meet ASME A13.1 Standard regarding marker size and letter height.

Legend	Color	Part Number
ACID	Yellow	64001
AIR	Blue	64002
ASBESTOS FREE INSULATION	Blue	64003
BOILER FEEDWATER	Yellow	64004
CAUSTIC	Yellow	64005
CHILLED WATER	Green	64006
CHILLED WATER RETURN	Green	64007
CHILLED WATER SUPPLY	Green	64008
CITY WATER	Green	64009
COLD WATER	Green	64010
COMPRESSED AIR	Blue	64011
COMPRESSED AIR	Yellow	64012
CONDENSATE	Yellow	64013
CONDENSATE RETURN	Yellow	64014
CONDENSER WATER	Green	64015
CONDENSER WATER RETURN	Green	64016
CONDENSER WATER SUPPLY	Green	64017
COOLING WATER RETURN	Green	64018
COOLING WATER SUPPLY	Green	64019
DOMESTIC COLD WATER	Green	64020
DOMESTIC HOT WATER	Yellow	64021
DRAIN	Yellow	64022
FIRE PROTECTION WATER	Red	64023
FUEL OIL	Yellow	64024
GAS	Yellow	64025
GLYCOL RETURN	Yellow	64026
GLYCOL SUPPLY	Yellow	64027
HEATING RETURN	Yellow	64028
HEATING SUPPLY	Yellow	64029
HEATING WATER RETURN	Yellow	64030
HEATING WATER SUPPLY	Yellow	64031
HI PRESS CONDENSATE	Yellow	64032
HI PRESS STEAM	Yellow	64033
HOT WATER	Yellow	64034
HOT WATER RETURN	Yellow	64035
HOT WATER SUPPLY	Yellow	64036
LO PRESS CONDENSATE	Yellow	64037
LO PRESS STEAM	Yellow	64038
MEDIUM PRESS STEAM	Yellow	64039
NATURAL GAS	Yellow	64040
NITROGEN	Green	64041
NON POTABLE WATER	Yellow	64042
OIL	Yellow	64043
OXYGEN	Yellow	64044
POTABLE WATER	Green	64045
RETURN	Yellow	64046
RETURN	Green	64047
ROOF DRAIN	Green	64048
SANITARY DRAIN	Green	64049
SANITARY SEWER	Green	64050
SPRINKLER WATER	Red	64051
STEAM	Yellow	64052
SUPPLY	Yellow	64053
SUPPLY	Green	64054
VACUUM	Yellow	64055
VENT	Yellow	64056
WASTEWATER	Yellow	64057
WATER	Green	64058

# Pipe Markers

## Fire Protection & Fire Sprinkler ID

**TO ORDER** Specify the part number and quantity. Combine total number of stock rolls for best price. For custom labels/tags specify the legend, color and quantity of rolls needed.



### MS-970 Coiled Plastic Markers

For indoor environments WITHOUT high heat & harsh chemicals.

- Complies with ASME A13.1 "Scheme for the Identification of Piping Systems"
- Coiled plastic pipe markers are available in six sizes to fit pipe with overall outside diameters of 1/4" through 5 7/8" [including insulation thickness]

STYLE	SIZE
TM	1/4" - 3/8"
A	1/2" - 1"
B	1 1/8" - 2 1/4"
C	2 3/8" - 3 1/4"
D	3 3/8" - 4 1/2"
E	4 5/8" - 5 7/8"
F*	6" - 7 7/8"
G*	8" - 10"
H*	over 10"

\*strap-on

For pipe 6" in diameter and larger, use nylon straps to secure the plastic marker around the pipe (straps included).

### MS-900 Self-Adhesive Pipe Markers and Fire Damper Markers

Use MS-900 labels to identify the Fire Protection Piping and Fire Damper Access Doors

- Self-adhesive labels simply adhere to access doors and piping
- Markers can be customized to designate the specific system or zone
- Sizes and colors meet the ASME-A13.1 Standard

Style	Pipe Diameter with insulation	Marker size	Letter Size
A	3/4" thru 2 1/4"	1" x 8"	3/4"
B	2 1/2" thru 7 7/8"	2 1/4" x 13"	1 3/8"
C	8" thru 10"	4" x 24"	2 1/2"
D	over 10"	4" x 32"	3 1/2"

### Valve Tag Identification

MSI's valve tags are made of laser-etched red anodized aluminum, rigid engraved plastic or 19-gauge brass tags as noted in 3-8.3 of NFPA Standard #13 for valve identification. The tags can be secured with various fasteners (see page 35 for fasteners).



**TO ORDER** Combine quantities for best pricing.

### Engraved Plastic Tags & Access Door Signs

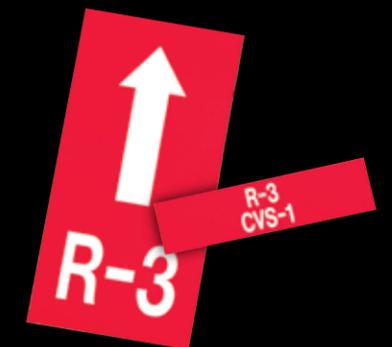
- Engraving provides high contrast between letter color and background color for easy visibility
- Standard tags are engraved on 1/16" plastic stock with mounting holes or adhesive backing
- Colors: red with white letters; white with black or red letters
- Larger sizes are available; call for a quote



**TO ORDER** Specify quantity of each tag or signs, legend, letter height, size, colors and whether you need adhesive backing or drilled mounting holes.

### MS-900 Self-Adhesive Fire Riser and Sprinkler Labels

- Identify each riser to isolate it for testing/maintenance
- Install labels at manifolds and major changes in direction
- Highly-visible white on red printing provides quick identification for fire departments or in-house personnel
- Mark branch lines from control valve to isolate branch and eliminate the need to shut down the entire main header



**TO ORDER** Specify riser number, size, and quantity

# Pipe Markers

## Specialty Items

### Underground Warning Tape

Stock legend	Color text/background	part # 3"	part # 6"
CAUTION BURIED ELECTRIC LINE BELOW	Black / Red	52201	52208
CAUTION BURIED FUEL LINE BELOW	Black / Yellow	52202	52209
CAUTION BURIED NATURAL GAS LINE BELOW	Black / Yellow	52203	52210
CAUTION BURIED PIPE LINE BELOW	Black / Yellow	52204	52211
CAUTION BURIED SEWER LINE BELOW	Black / Green	52205	52212
CAUTION BURIED STEAM LINE BELOW	Black / Yellow	52207	52213
CAUTION BURIED WATER LINE BELOW	Black / Blue	52206	52214
CAUTION CAUTION CAUTION	Black / Yellow	52216	NA



### Detectable Underground Warning Tape

Stock legend	Color text/background	part # 3"	part #6"
CAUTION BURIED ELECTRIC LINE BELOW	Black/Red	52215	52220
CAUTION BURIED GAS LINE BELOW	Black/Yellow	52216	52221
CAUTION BURIED OXYGEN LINE BELOW	Black/Green	52226	52227
CAUTION BURIED PIPE LINE BELOW	Black/Yellow	52217	52222
CAUTION BURIED SEWER LINE BELOW	Black/Green	52218	52223
CAUTION BURIED WATER LINE BELOW	Black/Blue	52219	52224



**TO ORDER** Specify the part number and quantity.

For custom legends, please call for a quote.

### Underground Warning Tape

Color-coded tape guards against costly and dangerous "Dig-ins".

- Designed to be buried above metallic underground piping or cables to warn excavators of utility lines
- Non-adhesive 4 mil. polyethylene tape, surface-printed. Available in: 3" or 6" x 1000 ft. rolls
- Custom legends available. Call for a quote.
- Conforms to the APWA Standard

### Detectable Underground Warning Tape

Locates buried non-metallic pipes before you dig.

- Printed, 4.5 mil. foil tape allows for any standard metal detector to quickly locate underground services
- Available in: 3" or 6" x 1000 ft. rolls
- Recommended burial depths: 3" tape – less than 24" deep; 6" – more than 24" deep
- Custom legends available. Call for a quote.

### Equipment Locator Tacks

Ideal for marking the location of valves, dampers, booster coils and controllers above acoustical ceiling tiles.

- Simply push tack into ceiling tile or insulation near closest access point
- 7/8" diameter heads can be written on with marking pen
- Available in orange, red, white, yellow, black, green and light blue

### Pre-cut Oilboard Stencils and Reusable Plastic Stencils

- Available in several different sizes with larger stencils available upon request
- Standard letter heights: [ASME 13.1 letter sizes included] 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2" and 3 1/2"
- Reusable stencils are cut from 0.020" plastic and can be reused for multiple projects.



**TO ORDER** List stencil legends required, specify character height needed and quantity.

### 12 oz. Spray Stencil Ink

- Permanent, quick-drying, weather-resistant ink
- Provides high-contrast marking on pipes and insulation
- Colors: Black, White, Blue, Red, Yellow and Green



### Plenum-Rated Duct Markers

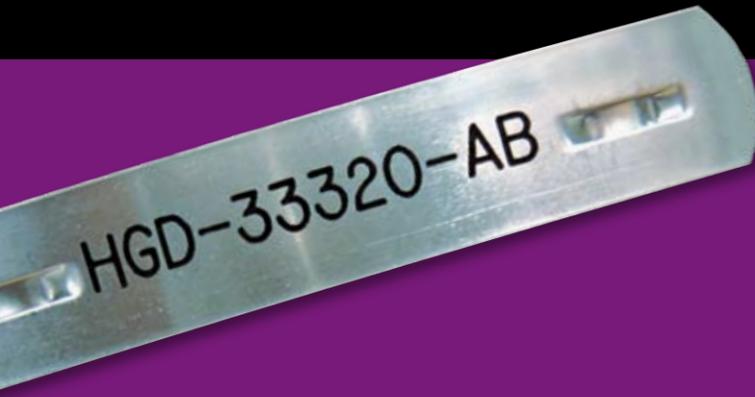
- Metalized self-adhesive labels tested to meet the requirements of E-84-03 "Standard Test Method" for surface burning characteristics of building materials
- Available with black text on metallic grey background
- Designed for use in plenums to help prevent the spread of smoke and gases in the event of a fire



**TO ORDER** Specify part number and quantity. Combine all for best price.

Legend	Color of background	2 1/4" x 13"	4" x 24"
EXHAUST AIR	Metallic Grey	92601	93601
INTAKE AIR	Metallic Grey	92602	93602
OUTSIDE AIR	Metallic Grey	92603	93603
RELIEF AIR	Metallic Grey	92604	93604
RETURN AIR	Metallic Grey	92605	93605
SUPPLY AIR	Metallic Grey	92606	93606
ARROW	Metallic Grey	92607	93607

# Cable & Conduit Identification



## MS-900 Conduit & MS-970 Coiled Conduit (orange background only)

Stock legend	MS-900 Part Numbers			MS-970 Part Numbers
	½" x 2½"	1" x 8"	2" x 9"	
110 VOLTS	70001	71001	72001	9780-
115 VOLTS	70002	71002	72002	9781-
120 VOLTS	70003	71003	72003	9782-
120/208 VOLTS	70004	71004	72004	9783-
208 VOLTS	70005	71005	72005	9784-
220 VOLTS	70006	71006	72006	9785-
230 VOLTS	70007	71007	72007	9786-
240 VOLTS	70008	71008	72008	9787-
277 VOLTS	70010	71010	72010	9788-
277/480 VOLTS	70011	71011	72011	9789-
440 VOLTS	70012	71012	73011	
480 VOLTS	70014	71014	72014	9790-
600 VOLTS	70016	71016	72016	9791-
4,160 VOLTS	70026	71026	72026	9792-
CONTROL	70027	71027	72027	9793-
DATA	70028	71028	72028	9794-
FIBER OPTIC CABLE	70029	71029	72029	9795-
FIRE ALARM	70030	71030	72030	9796-
LIGHTING	70017	71017	72017	9797-
POWER	70018	71018	72018	9798-
SECURITY	70025	71025	72025	9799-
SINGLE PHASE	70019	71019	72019	9696-
TELEPHONE	70031	71031	72031	9697-
THREE PHASE	70020	71020	72020	9698-

**TO ORDER** MS-900 - Select part number from chart above.  
MS-970 - Select part number, but add letter from chart at right that corresponds to pipe diameter

## High-Performance Stainless Steel Cable Markers

Use laser etched #316 stainless steel strap-on cable markers for marine, chemical or high heat environments.

- Text is permanently etched into stainless steel
- Tags are strapped to cable using plastic or stainless steel cable ties

## MS-900 Electrical System ID

Designed for labeling conduit, panel boxes, circuit breakers, cable trays and connections to equipment.

- Black text on orange labels provide a highly-visible warning of potential electrical hazards
- Premium MS-900 material insures long-lasting durability

## MS-970 Coiled Conduit & Cable ID



Designed to eliminate confusion of tightly packed conduit and cable.

- Markers quickly snap around conduit or cable, clearly identifying voltages or functions
- To indicate diameter of cable or conduit insert Style letter after four digit part number

Designed for use in the process chemical industry and for outdoor applications. Five year guarantee is our promise that MS-995 markers will stand up to high heat, harsh chemicals and direct exposure to sunlight.

# Maxilar Markers MS-995



- Polyester/TEDLAR construction provides proven protection from sunlight and maximum resistance to acids and bases found in process operations
- Sub-surface printing and TEDLAR lamination protects graphics from damaging chemicals and sun fading
- Ideal for chemical process plants, pharmaceutical plants, pulp and paper mills, and upstream and downstream oil and gas facilities
- Precoiled markers install easily by wrapping completely around the pipe and affixing to themselves [not the pipe surface] with a TEDLAR sealing strip

- Service temperature range from -40° to 250° F
- Eliminates pipe surface preparation before installation
- Complies with ASME A13.1 "Scheme for the Identification of Piping Systems" standard with regard to color, marker size and letter height
- Markers for larger diameter pipe are secured by stainless steel straps
- Markers can be removed and reinstalled for re-insulation or repainting

TEDLAR is a trademark of DuPont Corporation

# Pipe Markers

MS-995



**TO ORDER** Complete the four digit part number for each legend using the letter indicating the pipe size.

Example: BOILER FEED WATER for a 6" outside diameter pipe would have the part number 9941-E.

Combine total quantity of stock markers for best price.

## MS -995 Maxilar Markers

Designed for the process chemical industry and outdoor environments.

### Styles Available

Coiled polyester/TEDLAR pipe markers are available in ten standard sizes to fit pipes with overall outside diameters of 3/8" through 18" [including insulation thickness]. MS-995 Markers are designed to meet ASME A13.1-1996 "Scheme for the Identification of Piping Systems" except styles J,K,L & N, which do not meet the ASME A13.1-1996 standard regarding marker size and letter height.

**Note:** Coiled, wrap-around markers can be custom made for any diameter pipe. Call for a quote.

### Style M:

For piping 8" and larger, the 4 1/2" x 33" marker consists of a TEDLAR laminated legend label applied to a durable high-density polyethylene carrier. Markers are strapped onto the pipe using stainless steel straps. Meets ASME A13.1

See the Stainless Steel Straps and Locking Tools on page 25

Pipe Diameter	Marker Style	Marker Width	Character Height	Marker Type
3/8" - 1/2"	TM	3"	1/4"	Wrap Around
5/8" - 1"	A	8"	1/2"	Wrap Around
1 1/8" - 2 1/2"	B	8"	3/4"	Wrap Around
2 1/2" - 4 3/4"	D	12"	1 1/4"	Wrap Around
5" - 7 7/8"	E	12"	1 1/4"	Wrap Around
8" - 10"	J	12"	1 1/4"	Wrap Around
11" - 12"	K	12"	1 1/4"	Wrap Around
13" - 15"	L	12"	1 1/4"	Wrap Around
16" - 18"	N	12"	1 1/4"	Wrap Around
8" and up	M	32"	2 1/2" - 3 1/2"	Strap-on

Legend	Color	Part#
ACID	Yellow	9802-
ALUM	Yellow	1006-
AMINE	Yellow	1054-
AMMONIA	Yellow	1005-
BIOCIDE	Yellow	1008-
BLACK DYE	Yellow	1009-
BOILER BLOWDOWN	Yellow	1011-
BOILER DRAIN	Yellow	1012-
BOILER FEEDWATER	Yellow	9941-
BREATHING AIR	Blue	1102-
BROKE	Yellow	9905-
BROWN STOCK	Yellow	9906-
BUTADIENE	Yellow	1014-
BUTANE	Yellow	1013-
BUTENE	Yellow	1055-
CALCIUM CARBONATE	Yellow	9942-
CATALYST	Yellow	1015-
CAUSTIC	Yellow	9907-
CAUSTIC SODA	Yellow	9943-
CHILLED WATER RETURN	Green	1016-
CHILLED WATER SUPPLY	Green	1017-
CHLORINE	Yellow	9908-
CHLORINE DIOXIDE	Yellow	9909-
CIP RETURN	Yellow	1142-
CIP SUPPLY	Yellow	1143-
CITY WATER	Green	1140-
CLARIFIED WHITE LIQUOR	Yellow	1018-
CLEAN CONDENSATE	Yellow	1019-
CLOUDY WHITE WATER	Yellow	1020-
COATED BROKE	Yellow	1021-
COATING SLURRY	Yellow	1056-
COLD WATER	Green	1141-
COMPRESSED AIR	Blue	1022-
COMPRESSED AIR	Yellow	1057-
CONDENSATE	Yellow	9944-
CONDENSER WATER RETURN	Green	1023-
CONDENSER WATER SUPPLY	Green	1024-
COOLING WATER	Green	1025-
COOLING WATER RETURN	Green	1106-
COOLING WATER SUPPLY	Green	1107-
CONTAMINATED CONDENSATE	Yellow	1028-
CRUDE OIL	Yellow	1026-
DEFOAMER	Yellow	9911-
DEMINEALIZED WATER	Green	1027-
DILUTION WATER	Yellow	9948-
DRAIN	Yellow	1029-
DRINKING WATER	Green	1030-
EFFLUENT	Yellow	1031-
ETHYLENE	Yellow	1032-
ETHYLENE GLYCOL	Yellow	1109-
FEED STOCK	Yellow	1033-
FILTERED WATER	Green	9914-
FILTRATE	Yellow	9913-
FIRE PROTECTION WATER	Red	1034-
FLARE	Yellow	1035-
FLOOR DRAIN	Yellow	1036-
FLUSH WATER	Yellow	1061-

Legend	Color	Part#
FOUL CONDENSATE	Yellow	9949-
FRESH WATER	Green	1037-
FUEL GAS	Yellow	1038-
FUEL OIL	Yellow	9950-
#2 FUEL OIL	Yellow	1039-
#6 FUEL OIL	Yellow	1040-
GAS	Yellow	1144-
GLYCOL	Yellow	1042-
GLYCOL RETURN	Yellow	1111-
GLYCOL SUPPLY	Yellow	1112-
GREEN LIQUOR	Yellow	9915-
GROUNDWOOD	Green	1041-
HARDWOOD STOCK	Yellow	9916-
HEATING WATER RETURN	Yellow	1145-
HEATING WATER SUPPLY	Yellow	1146-
HEAVY BLACK LIQUOR	Yellow	9951-
HEXANE	Yellow	1043-
HI PRESS CONDENSATE	Yellow	9947-
HI PRESS GAS	Yellow	1113-
HI PRESS SHOWER WATER	Yellow	1045-
HI PRESS STEAM	Yellow	1114-
HOT GAS	Yellow	1115-
HOT WATER	Yellow	1044-
HOT WATER RETURN	Yellow	1116-
HOT WATER SUPPLY	Yellow	1117-
HYDRAULIC OIL	Yellow	9917-
HYDROCHLORIC ACID	Yellow	1046-
HYDROGEN	Yellow	1047-
HYDROGEN PEROXIDE	Yellow	1048-
HYDROGEN SULFIDE	Yellow	1049-
IGNITER GAS	Yellow	1050-
INSTRUMENT AIR	Blue	9918-
INSTRUMENT NITROGEN	Blue	1118-
ISO-BUTANE	Yellow	1051-
ISO BUTYLENE	Yellow	1052-
KEROSENE	Yellow	1062-
LO PRESS CONDENSATE	Yellow	9945-
LO PRESS STEAM	Yellow	1120-
LUBE OIL	Yellow	9920-
LUBE OIL RETURN	Yellow	1147-
LUBE OIL SUPPLY	Yellow	1148-
MAKEUP WATER	Green	1053-
MEDIUM PRESS CONDENSATE	Yellow	9946-
MEDIUM PRESS STEAM	Yellow	1156-
METHANOL	Yellow	9952-
MILL AIR	Blue	9921-
MILL WATER	Green	9922-
MTBE	Yellow	1063-
NATURAL GAS	Yellow	9923-
NITROGEN	Blue	9964-
NON CONDENSABLE GAS	Yellow	9953-
NON POTABLE WATER	Yellow	1066-
NORMAL BUTANE	Yellow	1067-
OFF GAS	Yellow	1068-
OVERFLOW	Yellow	9965-
OXYGEN	Green	1074-
PLANT AIR	Blue	9924-
PLANT WATER	Green	9925-

Legend	Color	Part#
POTABLE WATER	Green	9968-
PROCESS WATER	Green	1069-
PROCESS WATER RETURN	Green	1149-
PROCESS WATER SUPPLY	Green	1150-
PROPANE	Yellow	9971-
PULP	Yellow	9962-
QUENCH WATER	Yellow	1129-
RAFFINATE	Yellow	1070-
RAW WATER	Green	9963-
RED DYE	Yellow	9972-
REJECTS	Yellow	9927-
RELIEF	Yellow	9973-
RETENTION AID	Yellow	9974-
ROOF DRAIN	Green	9975-
SALTCAKE	Yellow	9976-
SANITARY DRAIN	Green	1131-
SANITARY SEWER	Green	1130-
SEAL WATER	Green	9928-
SHOWER WATER	Yellow	9977-
SIZE	Yellow	9928-
SOAP	Yellow	9979-
SODA ASH	Yellow	9980-
SODIUM CHLORINATE	Yellow	9954-
SODIUM HYDROXIDE	Yellow	9955-
SOFT WATER	Green	1151-
SOFTWOOD STOCK	Yellow	9929-
STARCH	Yellow	9981-
STEAM	Yellow	9983-
50# STEAM	Yellow	9986-
150# STEAM	Yellow	9990-
STEAM CONDENSATE	Yellow	1152-
STOCK	Green	9930-
STORM DRAIN	Green	1153-
STORM SEWER	Green	1154-
STORM WATER	Green	1071-
STRONG BLACK LIQUOR	Yellow	9959-
SULFUR DIOXIDE	Yellow	9931-
SULFURIC ACID	Yellow	9931-
TALL OIL	Yellow	9995-
TITANIUM DIOXIDE	Yellow	9996-
TOWER WATER RETURN	Green	9997-
TOWER WATER SUPPLY	Green	9998-
TREATED WATER	Green	9999-
TURPENTINE	Yellow	1001-
UNBLEACHED STOCK	Yellow	9960-
UTILITY WATER	Yellow	1072-
VACCUM	Yellow	9933-
VENT	Yellow	9934-
WASTE OIL	Yellow	1073-
WASTE WATER	Yellow	1002-
WATER	Green	1159-
WEAK BLACK LIQUOR	Yellow	9937-
WEAK WASH	Yellow	9961-
WELL WATER	Green	1155-
WHITE LIQUOR	Yellow	9939-
WHITE WATER	Yellow	9940-
YELLOW DYE	Yellow	1003-

# Pipe Markers

Custom MS-995



## MS-995 Maxilar Markers

Coiled polyester pipe markers are available in ten standard sizes to fit pipes with overall outside diameters of 3/8" through 18" [including insulation thickness].

NOTE: Coiled wrap around markers can be made for any diameter of pipe. Specify pipe diameter when ordering

Marker Style	Pipe Diameter	Marker Style	Pipe Diameter
TM	3/8" – 1/2"	J	8" – 10"
A	1/2" – 1"	K	11" – 12"
B	1 1/8" – 2 1/2"	L	13" – 15"
D	2 1/2" – 4 3/4"	N	16" – 18"
E	5" – 7 7/8"	M*	8" and up

NOTE: Styles J,K,L,N do not meet the ASME A13.1-1966 standard regarding marker size and letter height.

STYLE M: For piping 8" and larger, the 4 1/2" x 33" marker consists of legend label applied to a durable high-density polyethylene carrier. Markers are strapped onto the pipe using stainless steel straps. Meets ASME A13.1-1996.



## TO ORDER CUSTOM MS-995 MARKERS

Fax or e-mail a list of all markers needed.

Include marker style, color, and legend information.

Determine the price per marker by referring to the "Custom Pricing Per Marker" table. Combine total quantity of markers for best price.

## Customized MS-995 Maxilar Markers

Designed for the process chemical industry to relate P&IDs to the actual piping configuration through the use of specialized markers and tags.

- Reduce time spent to trace piping, especially in emergencies
- Familiarize new personnel with plant piping layouts quickly
- Significantly reduces the possibility of human errors
- Identify processes and improve overall efficiency for maintenance and operations
- Guaranteed for five years; Maxilar Markers eliminate the need for costly relabeling

Choose the options that best suit your needs– include the following:

- Pipe Contents
- Line Numbers
- Lines Origins [From] and Destination [To]
- P&ID Drawing Numbers

## MS-995 High-Temperatures Stainless Steel Pipe Marker

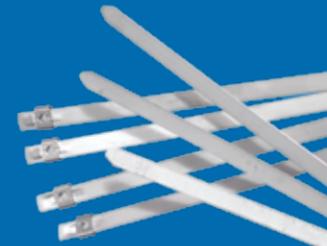
Use stainless steel markers on piping that has a surface temperature range from 250° F to 350° F.

- Markers consist of a MS-995 label applied to a flat stainless steel carrier
- Stand-off brackets hold the printed marker away from the heat of the pipe's surface
- Special heat-reducing spacers prevent the heat from affecting the printed legend
- Markers come complete with 2 stainless steel brackets, spacers and 2 stainless steel straps for easy installation

## Stainless Steel Banding Tools and Mounting Brackets

### Pre-cut Stainless Steel Straps

Easy to install, cut-to-length stainless steel straps for use with Style M markers. Durable 1/4" wide stainless steel straps come with attached locking head. Use with Locking Tool #15715. No clips required



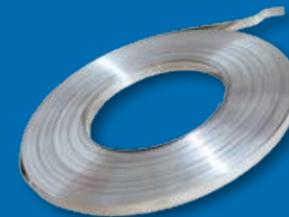
### Locking Tool for 35" – 60" Strap

This pocket-size tool punches a dimple and a fold into the strap, forming a permanent lock. Fast and easy to use.



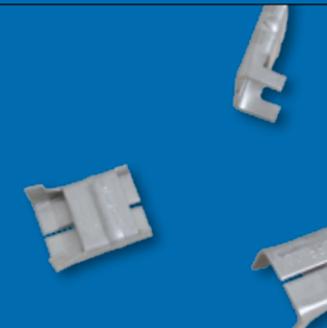
### Coil of Strapping

200' coil of 3/8" stainless steel. Used for attaching Style M pipe markers. Used with locking clip (part #15735) and fastening tool (#15740)



### Locking Clips for Strap

Stainless steel clips designed to be used with continuous-length strapping. Clips packaged 100 per bag.



### Locking Tool for Coil Strap

This tool is used to attach a coil strap, cut to size, from 200' coil. The tool easily tightens the strap forming a permanent lock.



### Stainless Steel Mounting Brackets

Used to mount signs or pipe markers onto piping or tanks. Bolt and hardware included. Use stainless steel straps to affix. Use heat-reducing spacers if surface is at or above 250° F.



# Ammonia Refrigeration Identification



## Standard IAR Abbreviations

Part #	Legend	Abbv	State	Pres
3017	BOOSTER DISCHARGE	BD	VAP	LOW
3001	CONDENSER DRAIN	CD	LIQ	HIGH
3002	DEFROST CONDENSATE	DC	LIQ	HIGH
3018	ECONOMIZER SUCTION	ES	VAP	LOW
3003	EQUALIZER	EQ	VAP	HIGH
3019	FOUL GAS	FG	VAP	LOW
3005	HIGH PRESSURE LIQUID	HPL	LIQ	HIGH
3006	HIGH STAGE DISCHARGE	HSD	VAP	HIGH
3007	HIGH STAGE SUCTION	HSS	VAP	LOW
3008	HIGH TEMP RECIRCULATED LIQUID	HTRL	LIQ	LOW
3009	HIGH TEMP RECIRCULATED SUCTION	HTRS	LIQ/VAP	LOW
3020	HIGH TEMP SUCTION	HTS	VAP	LOW
3021	HOT GAS	HG	VAP	HIGH
3004	HOT GAS DEFROST	HGD	VAP	HIGH
3022	LIQUID DRAIN	LD	LIQ	LOW
3023	LIQUID INJECTION COOLING	LIC	LIQ	HIGH
3024	LIQUID TRANSFER	LT	LIQ	LOW
3010	LOW STAGE SUCTION	LSS	VAP	LOW
3011	LOW TEMP RECIRCULATED LIQUID	LTRL	LIQ	LOW
3012	LOW TEMP RECIRCULATED SUCTION	LTRS	LIQ/VAP	LOW
3025	LOW TEMP SUCTION	LTS	VAP	LOW
3026	MEDIUM TEMP RECIRCULATED LIQUID	MTRL	LIQ	LOW
3027	MEDIUM TEMP RECIRCULATED SUCTION	MTRS	LIQ/VAP	LOW
3028	MEDIUM TEMP SUCTION	MTS	VAP	LOW
3029	PUMP OUT	PO		
3030	PURGE LINE	PL	VAP	HIGH
3013	RELIEF VENT	RV		
3014	RELIEF VENT	RV	VAP	HIGH
3015	THERMOSYPHON RETURN	TSR	LIQ/VAP	HIGH
3016	THERMOSYPHON SUPPLY	TSS	LIQ	HIGH

**TO ORDER** STOCK ITEMS-Complete the four-digit part number for each legend followed by style letters indicating pipe size. Example: The part number of a marker "HIGH PRESSURE LIQUID" for a 4" outside diameter pipe would be "3005-ABL".

## MS-900 Self-Adhesive Ammonia Refrigeration Pipe Markers

Indoor application that is ideal for cold-storage areas where pipe surface temperature is above 35° F.

- Adheres well to pipe and insulation with limited surface preparation
- Fast turn-around time with off-the-shelf delivery on standard legends
- Convenient scored arrow eliminates the need to determine flow direction at time of order

Also available in Spanish or French. Custom legends are available at no extra charge.

Ask for TEDLAR over-laminate for markers that need protection from UV fading and chemicals commonly used in process washdowns. Please call for a quote.



## Component Markers

(yellow background only)

- Complete the Ammonia identification package by labeling the process equipment. MS-900 self-adhesive markers meet the IAR Bulletin #114 requiring 2½" letter heights.
- Custom sizes, legends and pressure designations available.

## MS-995 MAXILAR Polyester/ TEDLAR Pipe Markers

Maximum-performance markers stand up to high heat, harsh chemicals and direct exposure to sunlight.

- Polyester/TEDLAR construction provides proven protection from the effects of direct sunlight
- Sub-surface printing and TEDLAR lamination protects graphics from damaging chemicals used in process washdowns
- Service temperature range from -40° F to 250° F
- Eliminates need for pipe surface preparation
- Markers can be removed for re-insulation or re-painting
- Precoiled markers install easily by wrapping completely around pipe and affixing to themselves [not the pipe surface] with a TEDLAR sealing strip.
- Styles AB, AD, & AE MS-995 MAXILAR coiled markers are for outdoor piping and for existing facilities where the surface temperature of the pipe is between -40° F and 250° F
- The 2¾" x 18" style AMF and 4½" x 33" style AM markers consist of a legend label applied to a durable high-density polyethylene carrier. Markers are strapped to larger diameter pipes using stainless steel straps. They are designed for easy installation and high visibility on rooftop or elevated piping.
- For pipe surface temperature 250°F - 350°F use stainless steel markers on page 24



## STANDARD IAR ABBREVIATIONS

Part #	Legend	Abbv	State	Pres
3101	BOOSTER DISCHARGE	BD	VAP	LOW
3102	CONDENSER DRAIN	CD	LIQ	HIGH
3116	DEFROST CONDENSATE	DC	LIQ	HIGH
3118	ECONOMIZER SUCTION	ES	VAP	LOW
3117	EQUALIZER	EQ	VAP	HIGH
3119	FOUL GAS	FG	VAP	LOW
3104	HIGH PRESSURE LIQUID	HPL	LIQ	HIGH
3105	HIGH STAGE DISCHARGE	HSD	VAP	HIGH
3106	HIGH STAGE SUCTION	HSS	VAP	LOW
3107	HIGH TEMP RECIRCULATED LIQUID	HTRL	LIQ	LOW
3108	HIGH TEMP RECIRCULATED SUCTION	HTRS	LIQ/VAP	LOW
3120	HIGH TEMP SUCTION	HTS	VAP	LOW
3121	HOT GAS	HG	VAP	HIGH
3103	HOT GAS DEFROST	HGD	VAP	HIGH
3122	LIQUID DRAIN	LD	LIQ	LOW
3123	LIQUID INJECTION COOLING	LIC	LIQ	HIGH
3124	LIQUID TRANSFER	LT	LIQ	LOW
3109	LOW STAGE SUCTION	LSS	VAP	LOW
3110	LOW TEMP RECIRCULATED LIQUID	LTRL	LIQ	LOW
3111	LOW TEMP RECIRCULATED SUCTION	LTRS	LIQ/VAP	LOW
3125	LOW TEMP SUCTION	LTS	VAP	LOW
3126	MEDIUM TEMP RECIRCULATED LIQUID	MTRL	LIQ	LOW
3127	MEDIUM TEMP RECIRCULATED SUCTION	MTRS	LIQ/VAP	LOW
3128	MEDIUM TEMP SUCTION	MTS	VAP	LOW
3129	PUMP OUT	PO		
3130	PURGE LINE	PL	VAP	HIGH
3112	RELIEF VENT	RV		
3113	RELIEF VENT	RV	VAP	HIGH
3114	THERMOSYPHON RETURN	TSR	LIQ/VAP	HIGH
3115	THERMOSYPHON SUPPLY	TSS	LIQ	HIGH

# Ammonia Refrigeration Identification



## Ammonia Refrigeration Marker Layout

Each marker has five information parts

- 1 Ammonia piping abbreviation section
- 2 Physical State: LIQ [Orange] and/or VAP [Blue]
- 3 Ammonia: black letters on yellow background
- 4 Pressure Level: LOW [70 PSIG or less] = Green  
HIGH [greater than 70 PSIG] = Red
- 5 Directional arrow [printed on marker] - scored

SECTION 1 - IIAR Approved Abbreviations (Partial List)	
Legend	Abbv
Condenser Drain	CD
Defrost Condensate	DC
Hot Gas Defrost	HGD
High Pressure Liquid	HPL
Highstage Discharge	HSD
High Stage Suction	HSS
High Temp Recirculated Liquid	HTRL
High Temp Recirculated Suction	HTRS
Low Temp Recirculated Liquid	LTRL
Low Temp Recirculated Suction	LTRS
Relief Vent	RV
Thermosyphon Return	TSR
Thermosyphon Supply	TSS

SECTION 2 - Physical State Abbreviation	
Legend	Abbv
Liquid	LIQ
High	HIGH

SECTION 3 - Ammonia	
Ammonia	AMMONIA

SECTION 4 - Pressure level abbreviation	
Legend	Abbv
Low [70 PSIG and under]	LOW
Vapor [over 70 PSIG]	VAP

SECTION 5 - Flow Direction Arrow	
Legend	Abbv
Left Pointing Arrow	← SCORED
Right Pointing Arrow	→ SCORED

**TO ORDER** Specify tag wording, size, color and quantity of each tag. If this information is available electronically simply email us the file.

## MS-215 Max-Tek™ Valve Tags

The highest-quality tags available for marking valves, instrumentation and equipment.

- Rigid, high-performance 125 mil. tags protect the graphics between two layers of chemically-resistant plastic
- Complete printing flexibility – each tag can include multiple lines of text, equipment number, operation and maintenance instructions, safety precautions, or other critical information.
- Service temperature range: -40° F to 200° F
- Background colors: Yellow, Green, Red, Blue, White, Black, Orange
- Legend colors are available in either Black or White
- Each tag comes with stainless steel grommets
- Custom colors are available
- Available in a 30 mil. flexible version for mounting on curved surfaces
- 5-year outdoor life



## Laser Etched Stainless Steel Equipment Tags

For use in: Food Processing Plants, Oil and Gas Facilities, Power Generating Stations and Marine and Offshore.

- #316 Stainless Steel
- Standard tags have round corners and mounting holes for ease of installation
- Black text is laser-etched for visibility and durability
- IDEAL FOR:
  - Equipment subject to frequent washdowns or chemical cleanings
  - Nameplates on machinery that continually run at high temperatures
  - Valve or instrument identification in highly-corrosive or caustic environments
- Bar-coded asset tags



# Ammonia Refrigeration Identification



## TO ORDER TAGS - Fax or e-mail your list of tag legends.

Combine all tags for best pricing. Specify the number and location of stainless steel grommets.

**INFORMATIONAL SIGNS** - Specify quantity, legend, letter height, size and color

## Photoluminescent [glow-in-the-dark] MS-215 Max-Tek™ Tags

Used to label valves or equipment that would be hard to find or identify in the event of power failure.

- Low light location tags are constructed of the same durable materials as our other MAX-TEK tags and the printed background glows for up to six hours in darkness.
- Available in two thicknesses:
  - 1) MS-215 R [125 mil] for rigid mounting applications
  - 2) MS-215 F [30 mil] for mounting to curved surfaces.
- Tags can be mounted using heavy duty adhesive (page 40) or hung with stainless steel fasteners (page 35)

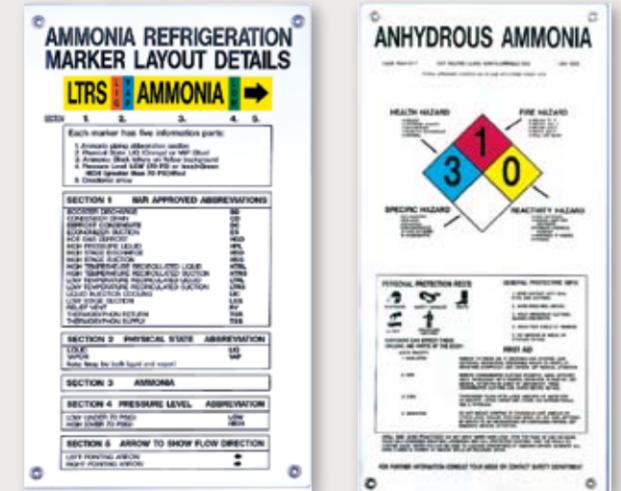
## TO ORDER AMMONIA IDENTIFICATION SIGNS -

Specify both the part number and quantity desired.  
**FLOW DIAGRAMS** - E-mail drawing file and quantity.

## MS-215 Max-Tek™ Ammonia Identification Signs

Specifically designed to provide a clear hazard warning for employees in food processing plants, mills and cold-storage facilities.

- Follows the NFPA system to denote the severity of hazard with regard to flammability, reactivity, health and specific chemical characteristics.
- Includes information about physical and health hazards, as well as proper safety and first aid procedures [in accordance with OSHA 29 CFR1910.1200]
- Wall chart sign provides a detailed explanation of ammonia marker layout and abbreviations helpful in training new personnel.
- Colors: Red, Blue, Yellow and Black on a White background.



Wall Chart Sign  
Part # 65547

Ammonia Tank & Vessel Sign  
Part # 65521

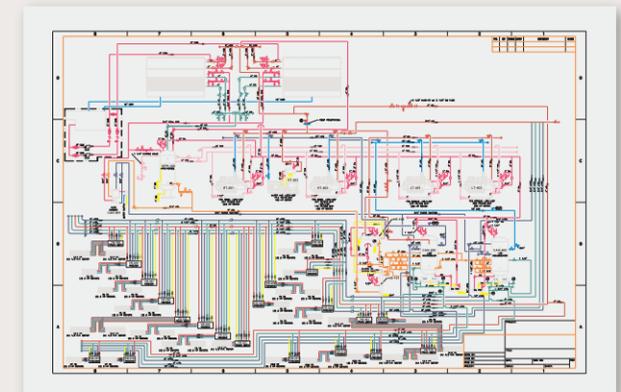
## MS-215 Max-Tek™ PSM Approved Contractor Informational Signs

- Control box for fire departments
- Authorized installation and repair contractors
- King valve locations
- Safety warnings
- System charges
- Use a permanent marker to write in lubricant and inventory information; text is easily removed with isopropyl alcohol when lubricant and/or inventory information changes.

## MS-215 Max-Tek™ Ammonia System Flow Diagrams

Display ammonia system diagrams in each engine room or in process areas near equipment.

- Signs are an excellent training aid
- Available in 3 sizes



**FOOD PROCESSING PLANT ENGINE ROOM 3A ORIGINAL REFRIGERATION SYSTEM (1993) ENGINE ROOM 3A (2001)**

ENGINEER: XYZ CORPORATE ENGINEERING  
PSM APPROVED CONTRACTOR: AB&C

REFRIGERATION INVENTORY SUMMARY APRIL 27, 2003  
(45,000 POUNDS) OF AMMONIA (ENGINE ROOM 3 & 3A)

AN EMERGENCY STOP BUTTON SHUTS DOWN ALL REFRIGERATION COMPRESSORS AND LIQUID PUMPS. THIS STOP BUTTON DOES NOT TURN ON THE EXHAUST FAN SYSTEM. EXHAUST FAN SYSTEM HAS ONE FAN (EF #9) RATED AT (14,547 CRM) THAT RUNS CONTINUOUSLY.

**EMERGENCY TELEPHONE NUMBERS**

FIRE	.....	911
XYZ CORPORATE	.....	1-800-555-1234
ENVIRONMENTAL DEPT.	.....	1-800-555-5678
XYZ ENGINEERING DEPT.	.....	1-800-555-5555
AB&C CONTRACTING	.....	1-800-555-6666

**LOCAL UTILITIES**

ELECTRIC	.....	1-800-555-4444
WATER DEPARTMENT	.....	1-800-555-8888
GAS	.....	1-800-555-7777

**AMMONIA LEAK OVER A 100 POUNDS**  
MUST BE CONTACTED WITHIN 15 MINUTES OF THE ACTUAL RELEASE.

ENVIRONMENTAL PROTECTION AGENCY	.....	1-800-555-2222
LOCAL EMERGENCY PLANNING COMMITTEE	.....	1-800-555-3333
STATE EMERGENCY RESPONSE COMMITTEE	.....	1-800-555-5555
NATIONAL RESPONSE CENTER	.....	1-800-555-1111

TYPE	LUBRICANTS	TELEPHONE#

TYPE	INVENTORY	QUANTITY

# Tags



## MS-215 Max-Tek™ Tags

Constructed of printed legends sealed between two layers of chemically-resistant plastic. This sealed construction offers excellent resistance to chemicals, abrasion and the fading effects of the sun. Tags are available in two thicknesses: MS-215 R [125 mil] for rigid requirements and MS-215 F [30 mil] flexible. For mounting signs on curved surfaces, we recommend the flexible construction. Use construction adhesive for secure installation (see page 40).

- Highest quality tag available
- For marking valves, instrumentation and equipment
- High-performance tags protect graphics from environmental conditions both indoor and outdoor
- Complete printing flexibility – each unique tag can include multiple lines of text, equipment number, operation and maintenance instructions, safety precautions, or other critical information
- Background colors: Yellow, Green, Red, Blue, White, Black or Orange
- Legend Colors: Black or White
- Each rigid tag comes with stainless steel grommets (as required)
- Also available: custom colors and sizes, double sided tags, bar-coding, photoluminescent material, and reflective material

### Material: MS-215 Tags

Service Temperature Range:	-40° F to 200° F
Water Resistance	Excellent
Outdoor Durability	Minimum 5 years
UV-Resistance	Excellent
Abrasion Resistance	Excellent

**Chemically-resistant to strong acids and bases**

**TO ORDER** MAX-TEK TAGS OR SIGNS - Specify tag or sign wording, size, color, rigid or flexible, and quantity of each tag. If this information is available electronically, simply e-mail us the file.

**TO ORDER** TAGS & SIGNS - Specify quantity of each tag or sign. Determine legend, letter height, size, colors, whether you need adhesive backing or drilled mounting holes. For quicker delivery e-mail us your list

## Engraved Plastic Equipment Tags & Signs

Bright, durable tags for labeling pumps, fans, air handling units and other equipment.

- Engraving provides high contrast between letter color and background color for easy visibility
- Excellent for in-house maintenance programs; use to verify machinery numbers shown on work orders, reducing costly errors and accidental shutdowns
- Ideal for providing building graphics and door signs
- For indoor applications (for outdoor applications see pages 32 and 40-45, MS-215 Max-Tek™ Tags & Signs)
- Standard tags are engraved on 1/16" plastic stock with mounting holes or adhesive backing [1/8" thick, 3 ply, or phenolic material is also available]
- Colors available: Black, Green, Red, and Blue with White letters; Yellow, Orange and White with Black letters
- Custom colors available; Yellow with Green letters



## Engraved Plastic Valve & Instrument Tags

For color-coding valves or instrumentation.

- Excellent visibility
- Standard tags are engraved on 1/16" plastic
- Colors available: Black, Green, Red, and Blue with White letters; Yellow and White with Black letters
- Standard sizes: 1 1/2", 2", 3", and 4" round, square or triangle shapes



# Tags



## TOP LINE SERVICE

[NONE]	Numbers Only	FP	Fire Protection
AIR	Air	GAS	Gas
CHW	Chilled Water	HTG	Heating
CHWR	Chilled Water Return	HHWR	Heating Hot Water Return
CHWS	Chilled Water Supply	HHWS	Heating Hot Water Supply
COND	Condensate	HW	Hot Water
CW	Cold Water	HWR	Hot Water Return
CWR	Cold Water Return	HWS	Hot Water Supply
CWS	Cold Water Supply	HVAC	HVAC
DCW	Domestic Cold Water	PLBG	Plumbing
DHW	Domestic Hot Water	STM	Steam

**TO ORDER** TAGS - Fax, e-mail or call in your list of tag legends. Combine all tags for best pricing.

## Brass Valve Tags

- 19-gauge brass tags are available from stock in 1½" and 2" diameters and 1½" and 2" squares
- Each tag is stamped and black-filled with ¼" service indicator on the top line and ½" numbers below
- Number sequences from 001 thru 999 for all legends are available as stock
- Packaged in sets of 25 consecutive numbers
- Tags can be customized (please call for a quote)

## Valve Tag Fasteners & Accessories

### 1) Jack Chain

- Durable chain for fastening valve tags
- Packed 50 feet / box to hang approximately 60 tags

### 2) Bead Chain

- Flexible chain in 4½" lengths including locking link
- 100 lengths per bag

### 3) "S" Hooks

- Sturdy easy-to-close hooks for attaching valve tags
- 100 hooks per bag
- 1¼" Brass or 1" Stainless Steel

### 4) Lead Meter Seals

- Fast, permanent way to attach valve tags
- Supplied in 10" lengths
- 100 lengths per pack

### 5) Zinc Snap Hooks

- Easy open/close snap hooks for valve tags
- 100 2½" hooks per box

### 6) 8" Nylon Tag Ties

- Simple, quick way to attach valve tags
- 100 ties per bag

### 7) Valve Chart Frame

- Aluminum frame holds 8½" x 11" valve chart
- Plastic lens included; glass lens available
- Durable and easy to install

### 8) Sealing Press

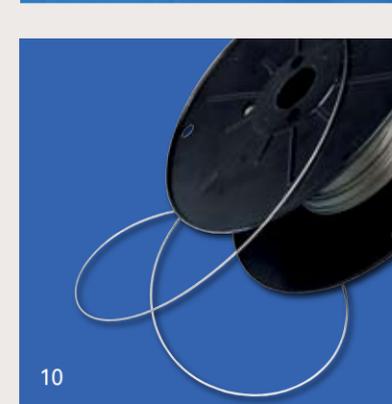
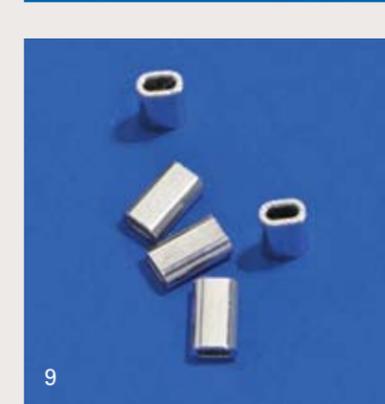
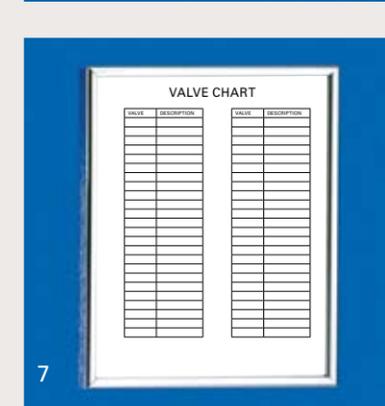
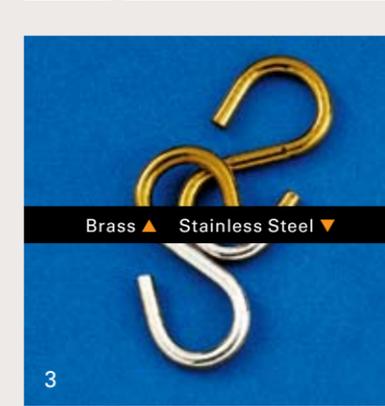
- Tool for sealing lead meter seals

### 9) Stainless Steel Swage Sleeves

- 100 per bag
- Type 316 stainless

### 10) Stainless Steel Braided Wire

- 100' roll
- Type 316 stainless



**TO ORDER** TAGS - Specify tag size, quantity and legends required. Other sizes available, please call for a quote.

## Laser-Etched Stainless Steel Equipment Tags

For use in: Food Processing Plants, Oil and Gas Facilities, Power Generating Stations and Marine and Offshore.

- #316 Stainless Steel
  - Standard tags have round corners and mounting holes for ease of installation
  - Black Text is laser etched for visibility and durability
- IDEAL FOR:
- Equipment subject to frequent washdowns or chemical cleanings
  - Nameplates on machinery that continually run at high temperatures
  - Valve or instrument identification in highly-corrosive or caustic environments
  - Bar-coded asset tags

## Stainless Steel Valve Tags

- PRV45783

## Control Valve & Sample Point Location Tags

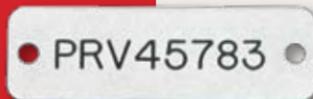
- MS-215 tags are 3½" x 6" and each can be hung or directly affixed to pipe immediately adjacent to sample points or control valves
- Significantly increases amount and legibility of information [ie: valve number, description, function, P&ID number, color coding, even sampling procedures]
- Tags are resistant to chemicals and fading and are for indoor and outdoor use
- Tags can be easily mounted using stainless steel brackets. Tags are bolted to stand-off brackets then fastened to pipe using stainless steel straps. Rigid tags are supplied ready-for-installation with bolts and mounting bracket.

## Bar Coded MS-215 Max-Tek™ Tags

Use for asset management or inventory control. Bar code makes capturing and tracking asset data easy and accurate

- Make sure critical maintenance checks or process readings are completed as scheduled and all vital information is transferred correctly to the master data base or maintenance management system.
- Tags are constructed from two layers of high-performance plastic which ensures that the bar code and printing are completely resistant to chemicals and fading
- Tags can be printed directly from data-base files
- Standard colors: Black, Red, Green, White, and Yellow.

**NOTE: FASTENERS LISTED ON PAGE 35.**



## Tags



**TO ORDER** Choose the appropriate size tag and indicate the color and legend sequence needed. Submit your list via e-mail, on disk, fax or phone.

### Anodized Aluminum Tags

Used to tag valves, instruments, small piping, cables or fugitive emission locations. These easy to read tags provide a highly visible contrast between the engraved legend and the colored background.

- Extremely durable, .020" thick tags can be used indoors and outdoors and are especially useful in environments with extreme heat or cold
- Available in 1½" and 2" circles and squares, each with one 3/16" mounting hole
- Background colors available: Green, Red, Blue, Gold Black and Natural
- Standard engraved letter height: ¼"

**NOTE: FASTENERS LISTED ON PAGE 35.**

### Aluminum Equipment Tags

Use for equipment plates to show model name and characteristics specific to a piece of equipment or maintenance instructions and operating procedures.

- Durable for indoor and outdoor use
- Available in 1" x 3", 2" x 4" and 4" x 6" plates
- Come with standard 3/16" mounting holes
- Two side holes for 1" x 3" and 2" x 4" tags; four corner holes for 4" x 6" size
- Engraved legend and Black enamel background provides high-contrast for enhanced legibility

## Signs

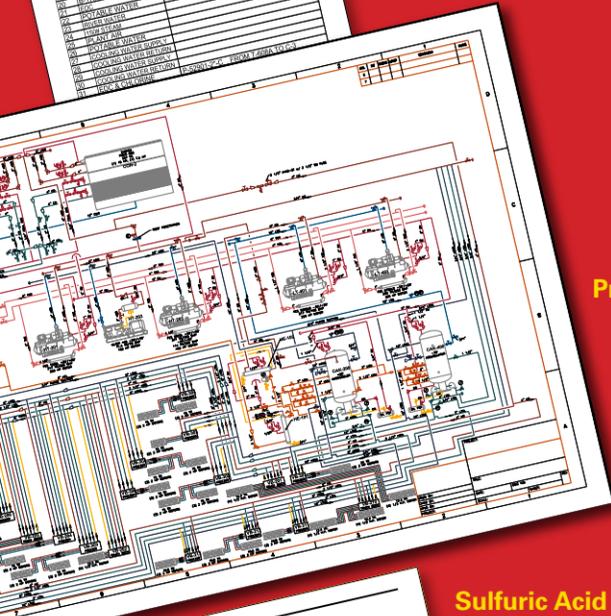


**Clear and well-placed plant signage is critical for employee safety and operational efficiency. MSI specializes in creating custom, highly-descriptive signage to provide plant personnel with necessary information regarding safety hazards, operating procedures and equipment identification.**

# Signs



Pipe Rack Locations



Process Flow

**Sulfuric Acid**  
 Danger!  
 4-93-9

to dark-brown, oil, odorless liquid, causes severe burns to skin, eyes, and respiratory tract. May cause chronic tooth erosion. GI irritation, and dermatitis. Reaction with water produces excessive heat.

Target Organs:  
 Skin, Respiratory System, Mucous Membranes, Gastrointestinal, Teeth

Sulfuric Acid Hazard



Piping Diagram

**TO ORDER** SIGNS - Please call for assistance.

## Custom Signs

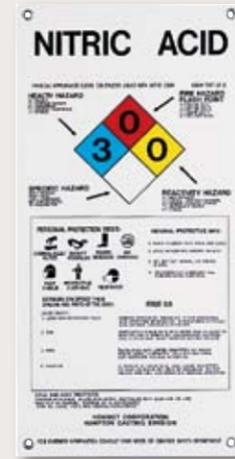
Use MS-215 Signs to communicate specific information to operators, maintenance or contractor personnel; indicating critical instrument procedures, lockout valve procedures, operating process flow diagrams, or emergency shut down configurations.

- Signs can be mounted directly in operating units, control rooms or at battery limit locations
- Completely resistant to chemicals and fading
- Available in 2 materials:
  - 1) MS-215 F a flexible [0.30"] sign material used for application on flat or curved surfaces. Use our heavy duty adhesives to attach the signs.
  - 2) MS-215 R a rigid sign [.125"] material used for hanging or mounting, using screws, bolts or rivets.
- Photoluminescent or reflective material available
- Custom sizes up to 36" x 48" (call for larger sizes)



## Construction Adhesive Available in 10.2 oz. tubes

Heavy Duty Part # 15769  
 Silicone Adhesive Part # 15756  
 Adhesive cartridge fits most caulk guns.  
 MSDS available.



## For Compliance with OSHA Right-to-Know Laws

Specifically designed to provide a clear hazard warning for employees in industrial plants, mills and chemical storage facilities

- Follows the NFPA system to denote the severity of hazard with regard to flammability, reactivity, health and specific chemical characteristics.
- Includes information about physical and health hazards as well as proper safety and first aid procedures [in accordance with OSHA 29 CFR 1910.1200]
- Colors: Red, Blue, Yellow, and Black on a White background
- For custom sizes: forward a copy of the MSDS (Material Safety Data Sheet) and designate the NFPA diamond hazard numbers

## MS-215 MAX-TEK Tank & Vessel Identification Signs

Use MS-215 flexible signs to name and number each tank or vessel

- Extremely durable signs are designed to be printed with the unique name and number of each tank or vessel
- Flexible sign construction allows for easy installation, conforming to the contours of the tank. Use heavy duty adhesive to attach sign to tank (page 40)
- Background colors available: White, Blue, Red, Black, or Yellow with Black or White letters
- Excellent outdoor life and chemical-resistance

Part #	Legend	Health	Fire	Reactivity	Specific Hazard
65520	ALUM	2	0	0	-
65522	BLACK DYE	1	1	1	-
65523	BLUE DYE	0	0	0	-
65525	CALCIUM CARBONATE	1	0	1	-
65526	CAUSTIC	3	0	1	-
65527	CHLORINE	3	1	0	W
65528	DEFOAMER	1	2	0	-
65529	DIESEL FUEL	0	2	0	-
65530	FUEL OIL	0	2	0	-
65531	GASOLINE	1	3	0	-
65532	GREEN LIQUOR	2	0	2	-
65534	HYDROGEN	3	4	0	-
65535	METHANE	1	4	0	-
65536	METHANOL	1	4	0	-
65537	NITRIC ACID	3	0	1	-
65538	NITROGEN	0	0	0	-
65539	PHOSPHORIC ACID	3	0	2	-
65540	POLYMER	0	0	0	-
65541	PROPANE	1	4	0	-
65542	RED DYE	0	1	0	-
65543	SODA ASH	1	0	0	-
65544	SULFURIC ACID	3	0	1	W
65545	TITANIUM DIOXIDE	0	0	0	-
65546	WHITE LIQUOR	3	0	2	OXY



**TO ORDER** Select a part number and quantity required **S** for self-adhesive label or .030 flexible signs. Combine total number of labels or signs for best price. If you need custom signage, please call.



## MS-215 Photoluminescent Signs for Evacuation and Escape

- Clearly identify a safe pathway for evacuation in stairwells, basements, hallways, warehouses, below decks on ships or offshore installations
- Illuminate exits or escape routes for personnel
- Glow time is 6 hours and recharges after 30 minutes exposure to sunlight, incandescent or fluorescent lighting
- Meets ASTM E 2072, ISO/CD 15370, and IMO Resolution A.752[18] requirements
- Available in MS-215F outdoor-grade plastic signs or in MS-960 self-adhesive labels



Size: 6" x 18" Part # IMO 201



Size: 6" x 18" Part # IMO 202



Size: 6" x 18" Part # IMO 203



Size: 6" x 18" Part # IMO 204



Size: 6" x 18" Part # IMO 205



Size: 6" x 18" Part # IMO 206



Size: 6" x 18" Part # IMO 207



Size: 6" x 18" Part # IMO 208



Size: 6" x 18" Part # IMO 209



Size: 6" x 18" Part # IMO 210



Size: 6" x 18" Part # IMO 213



Size: 6" x 18" Part # IMO 216



Size: 6" x 18" Part # IMO 219



Size: 6" x 18" Part # IMO 222



Size: 4" x 12" Part # IMO 225



Size: 4" x 12" Part # IMO 228



Size: 4" x 12" Part # IMO 231



Size: 4" x 12" Part # IMO 234



Size: 6" x 18" Part # IMO 211



Size: 6" x 18" Part # IMO 214



Size: 6" x 18" Part # IMO 217



Size: 6" x 18" Part # IMO 220



Size: 6" x 18" Part # IMO 223



Size: 4" x 12" Part # IMO 226



Size: 4" x 12" Part # IMO 229



Size: 4" x 12" Part # IMO 232



Size: 4" x 12" Part # IMO 235



Low-Level Lighting Arrows  
Part #: IMO 237  
Size: 3" x 18"



Size: 6" x 18" Part # IMO 212



Size: 6" x 18" Part # IMO 215



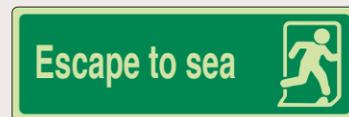
Size: 6" x 18" Part # IMO 218



Size: 6" x 18" Part # IMO 221



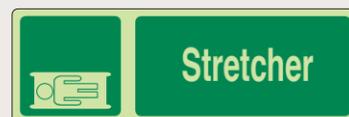
Size: 6" x 18" Part # IMO 224



Size: 4" x 12" Part # IMO 227



Size: 4" x 12" Part # IMO 230



Size: 4" x 12" Part # IMO 233



Size: 4" x 12" Part # IMO 236

**TO ORDER** Select part number and quantity needed.

## Safety/Operational Signs MS-215 MAX-TEK

When you need the most long-lasting high-performance signs available.

- For the ultimate in outdoor durability; MS-215 MAX-TEK signs are designed to shield the printed legends between two layers of high-performance plastic. The sealed sign provides maximum protection against moisture, sunlight, and the effects of harsh chemicals.
- Highly-visible printed legends will remain effective outdoors for years because of the UV-protective layer inherent in the construction
- Stainless steel grommets in each corner are standard to insure maximum life
- Available in magnetic material - call for quote

## MS-900 Self Adhesive Signs (SAS)

Use MSI's Self-Adhesive Signs in environments that are not subject to washdowns chemicals or UV exposure. MSI's SAS signs comply with OSHA requirements for signage. Also available with magnetic backing. Please call for a quote.



Size 215-R SAS  
7"x12" 80000 82000  
10"x14" 80001 82001  
12"x20" 80002 82002



Size 215-R SAS  
7"x12" 80003 82003  
10"x14" 80004 82004  
12"x20" 80005 82005



Size 215-R SAS  
7"x12" 80036 82036  
10"x14" 80037 82037  
12"x20" 80038 82038



Size 215-R SAS  
7"x12" 80039 82039  
10"x14" 80040 82040  
12"x20" 80041 82041



Size 215-R SAS  
7"x12" 80042 82042  
10"x14" 80043 82043  
12"x20" 80044 82044



Size 215-R SAS  
7"x12" 80045 82045  
10"x14" 80046 82046  
12"x20" 80047 82047



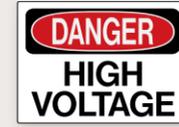
Size 215-R SAS  
7"x12" 80048 82048  
10"x14" 80049 82049  
12"x20" 80050 82050



Size 215-R SAS  
7"x12" 80006 82006  
10"x14" 80007 82007  
12"x20" 80008 82008



Size 215-R SAS  
7"x12" 80009 82009  
10"x14" 80010 82010  
12"x20" 80011 82011



Size 215-R SAS  
7"x12" 80051 82051  
10"x14" 80052 82052  
12"x20" 80053 82053



Size 215-R SAS  
7"x12" 80054 82054  
10"x14" 80055 82055  
12"x20" 80056 82056



Size 215-R SAS  
7"x12" 80057 82057  
10"x14" 80058 82058  
12"x20" 80059 82059



Size 215-R SAS  
7"x12" 80060 82060  
10"x14" 80061 82061  
12"x20" 80062 82062



Size 215-R SAS  
7"x12" 80063 82063  
10"x14" 80064 82064  
12"x20" 80065 82065



Size 215-R SAS  
7"x12" 80012 82012  
10"x14" 80013 82013  
12"x20" 80014 82014



Size 215-R SAS  
7"x12" 80015 82015  
10"x14" 80016 82016  
12"x20" 80017 82017



Size 215-R SAS  
7"x12" 80066 82066  
10"x14" 80067 82067  
12"x20" 80068 82068



Size 215-R SAS  
7"x12" 80069 82069  
10"x14" 80070 82070  
12"x20" 80071 82071



Size 215-R SAS  
7"x12" 80072 82072  
10"x14" 80073 82073  
12"x20" 80074 82074



Size 215-R SAS  
7"x12" 80075 82075  
10"x14" 80076 82076  
12"x20" 80077 82077



Size 215-R SAS  
7"x12" 80078 82078  
10"x14" 80079 82079  
12"x20" 80080 82080



Size 215-R SAS  
7"x12" 80018 82018  
10"x14" 80019 82019  
12"x20" 80020 82020



Size 215-R SAS  
7"x12" 80021 82021  
10"x14" 80022 82022  
12"x20" 80023 82023



Size 215-R SAS  
7"x12" 80081 82081  
10"x14" 80082 82082  
12"x20" 80083 82083



Size 215-R SAS  
7"x12" 80084 82084  
10"x14" 80085 82085  
12"x20" 80086 82086



Size 215-R SAS  
7"x12" 80087 82087  
10"x14" 80088 82088  
12"x20" 80089 82089



Size 215-R SAS  
7"x12" 80090 82090  
10"x14" 80091 82091  
12"x20" 80092 82092



Size 215-R SAS  
7"x12" 80093 82093  
10"x14" 80094 82094  
12"x20" 80095 82095



Size 215-R SAS  
7"x12" 80024 82024  
10"x14" 80025 82025  
12"x20" 80026 82026



Size 215-R SAS  
7"x12" 80027 82027  
10"x14" 80028 82028  
12"x20" 80029 82029



Size 215-R SAS  
7"x12" 80096 82096  
10"x14" 80097 82097  
12"x20" 80098 82098



Size 215-R SAS  
7"x12" 80099 82099  
10"x14" 80100 82100  
12"x20" 80101 82101



Size 215-R SAS  
7"x12" 80102 82102  
10"x14" 80103 82103  
12"x20" 80104 82104



Size 215-R SAS  
7"x12" 80105 82105  
10"x14" 80106 82106  
12"x20" 80107 82107



Size 215-R SAS  
7"x12" 80108 82108  
10"x14" 80109 82109  
12"x20" 80110 82110



Size 215-R SAS  
7"x12" 80030 82030  
10"x14" 80031 82031  
12"x20" 80032 82032



Size 215-R SAS  
7"x12" 80033 82033  
10"x14" 80034 82034  
12"x20" 80035 82035



Size 215-R SAS  
7"x12" 80111 82111  
10"x14" 80112 82112  
12"x20" 80113 82113



Size 215-R SAS  
7"x12" 80114 82114  
10"x14" 80115 82115  
12"x20" 80116 82116



Size 215-R SAS  
7"x12" 80117 82117  
10"x14" 80118 82118  
12"x20" 80119 82119

**CUSTOM SIGNS AVAILABLE**

Call us and we'll create your custom sign.

# Signs



Back 1



Back 2

## TO ORDER

**SELF-LAMINATING TAGS** - Choose part number for each tag legend and select the type of back legend needed. Example: "DANGER CAUSTIC" with back number 2 would have a part # SL40042.

**CUSTOM TAGS** - Specify legend, colors and quantity required. See custom price table. Combine total number of tags for best price. Other sizes available, call for more information.

## Premium Self-Laminating Accident Prevention Tags

- For durability and flexibility, these heavy duty 5 3/4" x 3" plastic tags are designed with a protective, over-laminating layer.
- Write your message on the tag, remove the liner and press the protective layer onto the tag. The sealed tag provides protection of vital text information against moisture, sunlight, and exposure to chemicals.
- Use for lockout of equipment, to warn of immediate or potential hazards or to convey maintenance instructions and operating procedures.
- Stainless steel grommets are used to ensure maximum life. Tags are supplied with nylon ties.
- Standard (non-self-laminating) tags also available in the part numbers listed. Call for a quote.

Part # 4010	Part # 4011	Part # 4012	Part # 4013	Part # 4014	Part # 4015
Part # 4016	Part # 4017	Part # 4018	Part # 4019	Part # 4020	Part # 4021
Part # 4022	Part # 4023	Part # 4024	Part # 4025	Part # 4026	Part # 4027
Part # 4001	Part # 4002	Part # 4009	Part # 4028	Part # 4029	Part # 4030
Part # 4003	Part # 4004	Part # 4008	Part # 4034	Part # 4035	Part # 4036
Part # 4005	Part # 4006	Part # 4007	Part # 4040	Part # 4041	Part # 4042
Part # 4031	Part # 4032	Part # 4033	Part # 4037	Part # 4038	Part # 4039
Part # 4043	Part # 4044	Part # 4045			



# Turnkey Installation

MSI is a turnkey contractor who has developed a unique methodology for labeling complex piping systems as well as implementing effective safety and equipment signage programs. Our facilities in Milwaukee, Houston, Singapore and Canada provide single-source accountability for all phases of complex labeling and safety signage projects worldwide.

When properly executed, pipe identification does more than merely satisfy regulatory requirements. It aids in routine plant operations, assists new operators in understanding the physical layout of piping systems, and provides vital, time-saving information assistance during emergencies when there is no time to trace lines.

Our products become an integral part of operator training during commissioning and start-up of new projects, providing the essential benefit of instantly identifying the contents of a pipe, it's direction of flow, origin and destination, as well as it's line number and associated P&ID number.



## MSI INSTALLATION TEAMS :

- 1] focus solely on labeling pipes, tagging valves and installing signs. Our concentrated approach allows projects to be completed in weeks rather than months.
- 2] take a detailed approach to each project. Special attention is paid to pipe racks, equipment and control valves, eliminating the need for client personnel to trace lines on a day-to-day basis and in times of emergency.
- 3] are properly equipped and trained to function independently, preventing disruptions with the clients' normal activities.
- 4] have extensive safety training and the latest equipment to ensure that each project is completed safely.
- 5] guarantee the client receives maximum value by applying their wealth of experience to ensure that all process labels, tags and signs are installed correctly and in areas that provide maximum visibility for facility operators.

