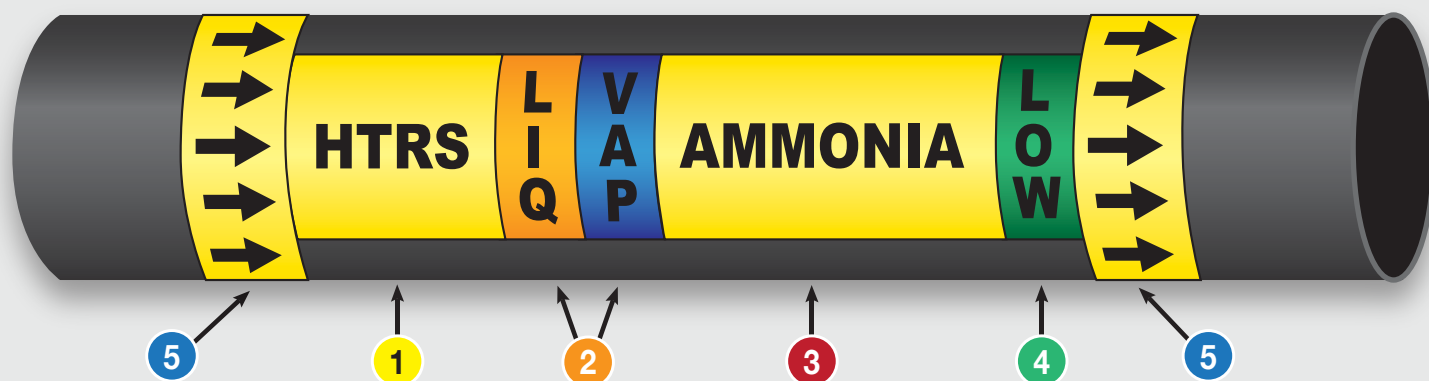


# AMMONIA REFRIGERATION SYSTEM

## PIPE MARKING GUIDE In compliance with the International Institute of Ammonia Refrigeration (IIAR) Standards

Ammonia Pipe Markers have five important components: Abbreviations, Physical State, Marker Body, Pressure Level & Flow Direction



### 1 ABBREVIATIONS

- Abbreviations for Ammonia System Components
- Printed in black on yellow

### 2 PHYSICAL STATE

- LIQ = Liquid (black or white printed on orange)
- VAP = Vapor (black or white printed on blue)
- LIQ/VAP - If both states exist, use both

### 3 MARKER BODY

- AMMONIA
- Printed in black on yellow

### 4 PRESSURE LEVEL

- HIGH (black or white printed on red)
- LOW (black or white printed on green)

BD = Booster Discharge

CD = Condenser

DC = Defrost Condensate

ES = Economizer Suction

HGD = Hot Gas Defrost

HPL = High Pressure Liquid

HSD = High Stage Discharge

HSS = High Stage Suction

HTRL = High Temp Recirculated Liquid

HTRS = High Temp Recirculated Suction

LIC = Liquid Injection Cooling

LSS = Low Stage Suction

LTRL = Low Temp Recirculated Liquid

LTRS = Low Temp Recirculated Suction

RV = Relief Vent

TSR = Thermosyphon Return

TSS = Thermosyphon Supply

VAP

LIQ

LIQ

VAP

VAP

LIQ

VAP

VAP

LIQ

LIQ/VAP

LIQ

VAP

LIQ

LIQ/VAP

VAP

LIQ/VAP

LIQ

AMMONIA

LOW

HIGH

HIGH

LOW

HIGH

HIGH

HIGH

LOW

LOW

HIGH

LOW

LOW

LOW

LOW

HIGH

HIGH

HIGH

### 5 FLOW DIRECTION

- Indicates the direction of flow of the system contents
- Place arrows at one or both ends of the Pipe Marker

This guide is for general information purposes only. It is not a substitute for review of applicable laws and standards.

## PIPE MARKER SIZE SPECIFICATIONS

Label size, text height, and placement should follow ANSI / ASME A13.1 guidelines.

OUTSIDE PIPE DIAMETER (including covering)	.75" - 1.25" (19mm - 32mm)	1.5" - 2" (38mm - 51mm)	2.5" - 6" (64mm - 152mm)	8" - 10" (203mm - 254mm)	OVER 10" (over 254mm)
MINIMUM LENGTH OF LABEL (field color)	8" (203mm)	8" (203mm)	12" (305mm)	24" (610mm)	32" (813mm)
MINIMUM HEIGHT OF LETTERS	0.5" (13mm)	0.75" (19mm)	1.25" (32mm)	2.5" (64mm)	3.5" (89mm)



# AMMONIA REFRIGERATION SYSTEM

## PIPE MARKING GUIDE In compliance with the International Institute of Ammonia Refrigeration (IAR) Standards

CREATE PROFESSIONAL, INDUSTRIAL-GRADE LABELS IN-HOUSE!



Printing your own, custom labels in-house is a cost-effective way to get professional results. The **LabelTac 4** is our #1 industrial labeling system. Print indoor/outdoor signs and labels up to 4" tall, and 40" long, that are UV, chemical, weather, water, and wear resistant, so they won't fade or smear over time. Great for pipe marking, as well as other safety signs and labels in your facility.

## ONE LABEL PRINTER THOUSANDS OF APPLICATIONS

Print custom, durable labels and pipe markers with the LabelTac4 thermal transfer printer.

Supplies are easy to load/unload

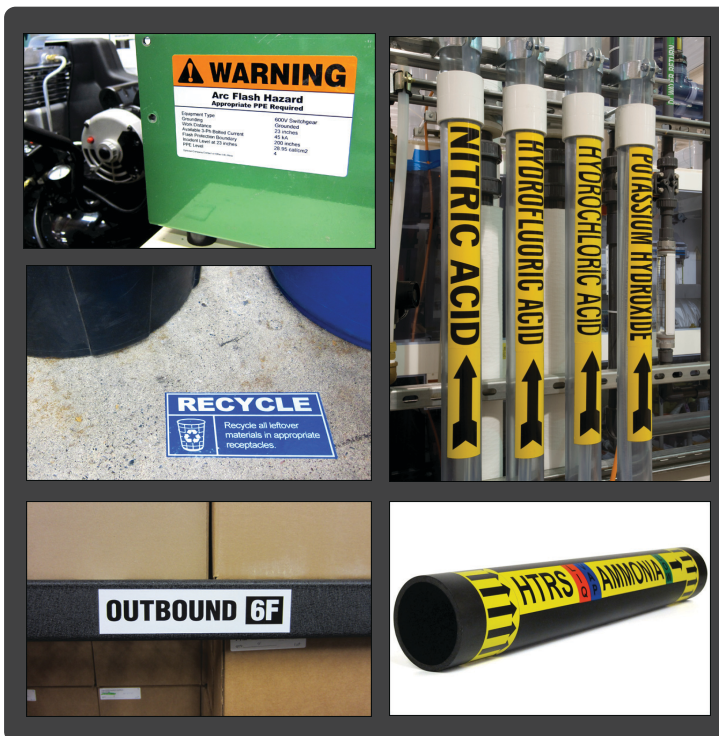
ROHS Compliant + ISO9001 + ISO14001 Compliant

Compatible with MS Word, Excel, OpenOffice or Bartender (included)



300 dpi print head w/ 4 year warranty

4 year warranty on parts "Manufacturer Defects"



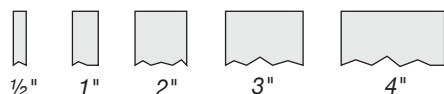
## INDUSTRIAL-GRADE, VINYL LABEL SUPPLY

Available colors:

- Yellow
- White
- Black
- Red
- Green
- Orange
- Blue
- Gray
- Purple
- Brown
- Clear



Available widths:



Labels are UV, chemical, weather, water, and wear resistant, and they won't fade or smear over time.

## SPECIALTY SUPPLIES

We carry a large selection of specialty supplies, including:

- Glow-in-the-Dark
- Shrink Tube
- Wire Wraps
- Cold Storage
- Die-Cut
- Magnetic
- Brushed Aluminum
- Reflective
- Repositionable
- Tear-Resistant Tag Stock
- More at [www.creativesafetysupply.com/](http://www.creativesafetysupply.com/)



Pre-printed, die-cut labels

Pipe marking arrows come in a variety of colors & sizes.

