

AMMONEXA™ Compared with Ammonia Test Strips and Detection Tapes

Different Tools for Different Ammonia Leak-Checking Requirements

Visual ammonia indicators are available in several forms. Although they all use a visible colour change to indicate the possible presence of ammonia, their method of use and intended application can differ considerably.

AMMONEXA™ is designed as a ready-to-use, hand-held leak-locating strip for maintenance technicians. Conventional ammonia test papers are generally supplied as small laboratory-style strips, while ammonia detection tapes are adhesive products intended to remain installed around selected joints and fittings.

Comparison at a Glance

Comparison Point	AMMONEXA™ NH ₃ Vapour Leak Locator Strip	Conventional Ammonia Test Strip or Test Paper	Adhesive Ammonia Detection Tape
Product format	Purpose-designed disposable sensor strip	Small test-paper strip, commonly based on an indicator such as phenolphthalein	Adhesive indicator tape supplied in a roll
Primary application	Local inspection of suspected ammonia leakage points	General ammonia checking and routine maintenance testing	Installed monitoring of selected pipes, valves, flanges and fittings
Method of use	Hold near the suspected leakage point using a suitable clip or holder	Expose the test paper near the suspected area and follow the manufacturer's instructions	Wrap or apply the tape directly around the component being monitored
Colour indication	Orange changes to blue	Common phenolphthalein-type papers change to pink	Commercial ammonia tapes commonly change from white to blue or blue-green
Adhesive required	No	No	Yes
Permanent installation required	No	No	Normally applied to the equipment and left installed

Comparison Point	AMMONEXA™ NH ₃ Vapour Leak Locator Strip	Conventional Ammonia Test Strip or Test Paper	Adhesive Ammonia Detection Tape
Suitable for checking several joints during one inspection round	Yes	Yes, subject to strip size and handling method	Less convenient because tape must be applied separately at every selected location
Suitable for unattended or intermittent-leak indication	No; intended for an operator-led inspection	Generally no; normally used during an inspection	Yes; certain commercial tapes are designed to remain installed for an extended period
Can help identify the exact leakage point	Yes, when moved carefully around the suspected valve, flange, weld or connection	Possible, although small test papers may be less convenient to position around equipment	Yes, when tape has been installed directly at the leaking component
Wetting requirement	No wetting is specified under the present AMMONEXA™ method of use	Depends on the strip chemistry and manufacturer's instructions	Normally no wetting required
Battery or electrical power required	No	No	No
Calibration required	No instrument calibration	No instrument calibration	No instrument calibration
Provides a numerical ammonia concentration	No; visual indication only	Generally no; visual indication only	No; visual indication only
Reusable	No	No	Normally replaced after indication, damage or the manufacturer's recommended service period
Main practical advantage	Quick, portable checking of multiple suspected leakage points	Simple, familiar and widely available test-paper format	Continuous visual indication at predetermined locations

Comparison Point	AMMONEXA™ NH ₃ Vapour Leak Locator Strip	Conventional Ammonia Test Strip or Test Paper	Adhesive Ammonia Detection Tape
Best suited for	Refrigeration-service inspections, maintenance rounds and pinpointing suspected leaks	General-purpose ammonia checks and occasional maintenance use	Selected critical joints where longer-term visual monitoring is required

Why Choose AMMONEXA™?

Ready for Maintenance Inspections

AMMONEXA™ is designed for technicians who need to inspect several valves, flanges, threaded connections, welds and compressor fittings during a refrigeration-maintenance round.

No Adhesive Application

The strip does not have to be wrapped around or bonded to the refrigeration equipment. It can be positioned close to the suspected leakage area using a suitable inspection holder.

Clear Orange-to-Blue Indication

The distinct colour transition provides a straightforward visual indication near the suspected ammonia leakage point. No colour-comparison chart is required.

Convenient for Difficult Locations

The strip can be used with a clip, flexible holder or telescopic inspection tool to reach joints that may be difficult to check safely by hand.

No Battery or Instrument Calibration

AMMONEXA™ is a disposable colourimetric maintenance aid. It does not require charging, electrical power, sensor calibration or an electronic display.

When Is Ammonia Detection Tape More Suitable?

Adhesive ammonia detection tape may be more suitable where a plant wants to monitor a particular valve, flange or pipe joint continuously for an intermittent leak.

The tape is installed directly around the selected component and inspected periodically for a colour change. Certain commercial ammonia detection tapes are designed to remain installed for several months, subject to the manufacturer's operating and replacement instructions.

When Is Conventional Ammonia Test Paper Suitable?

Conventional ammonia test paper can be useful for general maintenance checks and laboratory-style testing. Phenolphthalein-based ammonia papers commonly produce a pink colour when exposed to ammonia.

Their size, handling method, wetting requirements and response characteristics can vary between manufacturers. Users should therefore follow the instructions supplied with the particular test paper.

What About Ordinary pH Paper?

Ordinary universal pH paper is primarily intended to indicate the acidity or alkalinity of a liquid. Because ammonia produces an alkaline response when absorbed into moisture, damp pH paper may also change colour near ammonia vapour.

However, ordinary pH paper:

- Is not necessarily designed or validated for gas-phase ammonia leak location
- May require controlled wetting
- Can respond to other alkaline substances
- May produce several intermediate colours
- May require comparison with a printed pH colour chart

AMMONEXA™ is designed specifically as a convenient visual aid for checking suspected ammonia vapour leakage points in refrigeration systems.

Choosing the Appropriate Method

Choose AMMONEXA™ when:

A technician needs a portable, ready-to-use strip for checking several suspected leakage points during an inspection.

Choose conventional ammonia test paper when:

A basic test-paper method is sufficient and the user can follow the paper manufacturer's specified handling procedure.

Choose ammonia detection tape when:

A selected flange, valve or fitting needs an adhesive indicator that can remain installed for intermittent or longer-term observation.

Important Safety Information

AMMONEXA™ is a qualitative maintenance and leak-locating aid. It does not measure ammonia concentration and must not be used as a substitute for:

- Approved fixed ammonia gas-detection and alarm systems
- Calibrated portable ammonia detectors
- Personal protective equipment
- Ventilation and emergency-response systems

- Applicable refrigeration and occupational-safety procedures

Only trained personnel should approach a suspected ammonia leak. Never rely on smell to determine whether an area is safe. If a substantial leak is suspected, evacuate the area and follow the facility's established emergency procedure.