

**NABAKEM**<sup>®</sup>  
Chemicals & Aerosol



CLC-30

NABAKEM CLC-30(COLOR LEAK CHECK)

**Packaging** • Aerosol 420ml/can, 20cans/Box

**Unit :**

## Features

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- Very fine defect may be detected.
- Defects found easily with naked eyes.
- Color is changed(Yellow→Blue)
- No harmful for paint or metal.

## Uses

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- Leakage of various pressure resistant piping may be detected.
- Gas tank, LPG tank, LNG tank etc.

## How to Use

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- Pretreatment of tested surface

a) Remove oil content, moisture and alkaline materials, if necessary.

b) Especially if alkaline materials are adhered, flush tested surface with copious quantities of water and clean it with air or dustcloth.

Then dry it.

- Ammonia gas fillup

a) Input ammonia gas into airtight tank or piping to make ammonia gas concentration 0.01~1% in terms of weight ratio.

Explosion range of ammonia gas combined with air is 15~28%, showing its concentration is safe.

b) High pressure inside tank makes detection sensitivity good.

But influence of pressure is not that remarkable. Therefore, inspection should be done at the pressure (several mmHg~several tens of mmHg) slightly higher than atmospheric pressure.

c) Time of gas fillup and hold back should be over five minutes.

- Application of detection agent

a) As powders of CLC-30 are dispersed in volatile solvent, shake its container till stirring bead is shaken well with clatter.

Then spray it evenly in the air before use.

b) Spray it evenly and thinly to the surface of detected object. Thin film shortens detection time.

- Inspection

a) Leakage points are changed from yellow to blue normally within 5~10 minutes.

- b) Large leakage points shows large indication shape.
- c) Re-inspection for about 30~60 minutes is required for sufficient detection of fine leakage points.

- Post-treatment

Detection agent film after inspection is easily removed by dustcloth or wire brush.

- a) Mechanical removal by dustcloth or brush
- b) Flushing by pressure water



## Cautions

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- Permanence of indication

Indication maintains permanence over 24 hours by ammonia gas fillup alone.

When fillup gas is removed or temperature is over 70°C, decoloration occurs.

Use the product below 40°C.

- Influences of moisture

When CLC-30 is combined with adhesive water or moisture, it becomes weak-acid to create corrosion. Remove moisture completely.

- Welding slag residual

As covering materials of covered welding rod contains strong-alkaline components like water and glass, application of CLC-30 shows pseudo-decoloration as if there are cracks.

Neutralize the product with cleaner before inspection or remove the residues with wire brush.

However, the residues do not cause any problems with CO2 weld not using flux, TIG weld, MIG weld and submerged arc weld using metal flux.

- Residual of oil in enlarged tube

Weld between tube and tube plate of heat exchanger or boiler has alkaline materials of lubricants used for tube expansion, which tend to cause pseudo-discoloration.

The materials should be removed. Also oil remained in tube can not be removed easily.

It is highly recommended that cylinder oil or neutral lubricant of turbine oil should be used.

- Influences of surfactant

When test is done by CLC-30 after air test, alkaline surfactant (detergent) is used for soap water for air test.

Even if it is neutral, it shows alkalinity by thermolysis and tends to cause pseudo-discoloration.

Inspection surface should be clean. Or right surfactant should be selected.

Or surfactant should be removed completely for inspection.

- Toxicity of solvent

Low-toxic solvent is used.

Provide good ventilation when using it in copious quantity indoors.

- When using it at low temperature (above 5°C)

Spraying it below 5°C, sprayed particles are thick and not applied evenly.

In this case, dip it in warm water at 20°C ~ 30°C before use.(Be careful to prevent temperature from being above 40°C.)

- This flammable product uses high-pressure gas.

- Comply with following cautions.

1. Do not spray it toward flame.
2. Do not use it near stove and heater.
3. Do not use it in the room using fire.
4. Do not keep in the place above 40°C
5. Provide ventilation after using it in closed room.
6. Do not throw it into fire.
7. Punch the can after use and remove residual gas to throw it away.
8. Do not keep it in the closed place.