

Niko Hydro – splashproof switching material

Subject: Resistance when exposed to ammonia
Product group: Niko Hydro

Niko NV, a company under Belgian law, with its head office at Industriepark West 40, 9100 Sint-Niklaas, registered in the Crossroads Bank of Enterprises (CBE) under company number 0405.045.670 hereby makes the following declaration, based on testing carried out and the technical data available, with regard to the resistance of products from the Niko Hydro range when exposed to an ammonia-rich environment.

1. Basis for testing and reference framework

The materials and combined products from the Niko Hydro range were evaluated according to their behaviour when exposed to ammonia (NH₃) under controlled conditions.

The tests were carried out in accordance with internal test protocols focusing on:

- the chemical resistance of plastics and sealing materials
- the retention of mechanical and functional properties
- the visual stability of surfaces

The evaluation was carried out in the presence of ammonia at a concentration of:

→ **no more than 20 ppm (parts per million)**

This value corresponds to current reference levels for long-term exposure within certain European applications.

2. Results and observations

When exposed to ammonia at concentrations up to a maximum of 20 ppm, it was observed that:

- the products do not suffer any functional failure
- their mechanical integrity is retained and remains within the product specifications
- no significant degradation occurs that affects the product's intended use
- the degree of protection (IP classification) remains intact if the products have been installed correctly.

The evaluation is based on laboratory conditions and standardised test set-ups.

3. Scope of application

Based upon the results above, products from the Niko Hydro range can be used in environments where ammonia is present, **in so far as all of the conditions below are fulfilled:**

- The concentration of ammonia does not exceed 20 ppm.
- The exposure concerned is comparable to the conditions tested (no extreme peaks or cumulative load outside that range).
- The products are installed and used in accordance with Niko's current installation instructions and product specifications.

4. Restrictions and exclusions

This statement is subject to the following restrictions:

- The results are based on tests performed under controlled conditions and do not form any guarantee with regard to all possible conditions that may exist in practice.
- Unless validated individually, combinations with other chemical substances, gases or aggressive cleaning materials are not included within the scope of this declaration.
- Exposure to higher concentrations of ammonia, long-term cumulative effects or different environmental factors (such as extreme temperature, moisture or UV load) may affect performance.
- This declaration does not constitute any explicit or implicit warranty with regard to the life span of the products under the specific conditions that exist in a project.

5. Liability

Full responsibility for determining whether the product is suitable for its intended use lies with the user.

Niko NV cannot be held liable for damage, defects or impaired performance resulting from:

- use outside of the specified limits
- an installation not carried out in compliance with the regulations
- exposure to conditions that differ from the parameters used during testing

6. Final declaration

Based on the tests performed and the technical data available, Niko NV confirms that, within the conditions and restrictions specified in this document, the products from the Niko Hydro range are resistant to ammonia-rich environments up to a concentration no greater than 20 ppm.