

Dabco NEM catalyst CAS100-74-3 Evonik Germany

Overview

Dabco NEM is a tertiary amine-based foaming catalyst that facilitates urea (water-isocyanate) reactions in a variety of hard and soft polyurethane foam applications. It is the industry standard foaming catalyst for soft foams and is used in TDI-based soft foam systems such as mattresses, seats and automobiles. It is also used in combination with trimer catalysts in PIR laminated paperboard formulations. Dabco NEM is also available for MDI, TDI/MDI, MDI High Resilience (HR) soft molding foams as well as self-crusting and microcellular systems. It has a shelf life of 36 months.

CAS No.

Dabco NEM's CAS number is 100-74-3. This is a unique identifier for Dabco NEM that is used to track and identify it throughout the supply chain. The CAS number is also used to search databases and other resources for information about Dabco NEM.

Aliases

Dabco NEM is also known as 4-ethylmorpholine.

Molecular formula

Dabco NEM's formula is C₆H₁₃NO.

Physical and chemical properties

The physical and chemical properties of Dabco NEM are shown in the following table:

Properties	value
Looks	Clear colorless liquid
Scent	Slight ammonia smell
Specific gravity	1.040
Boiling point	200 °C
Flash point	100 °C
Water soluble	Miscible
Solubility in organic solvents	miscibility

Features

Promotes urea (water-isocyanate) reaction

Used in a variety of hard and soft polyurethane foam applications

Industry standard foaming catalyst for soft foams

For TDI-based soft foam systems, such as mattresses, seats, and automobiles

Used in combination with trimer catalysts in PIR laminated board formulations

Also available in MDI, TDI/MDI, MDI High Resilience (HR) soft molded foams as well as self-crusting and microcellular systems

The shelf life is 36 months



Application

- Soft polyurethane foam
- On-site pouring polyurethane system

- PIR laminated cardboard
- TDI, TDI/MDI, MDI High Resilience (HR) Soft molded foam
- Self-crusting foam
- Microcellular foam

Pros

- Promotes urea (water-isocyanate) reaction
- Used in a variety of hard and soft polyurethane foam applications
- Industry standard foaming catalyst for soft foams
- Can be used in combination with trimer catalysts
- Shelf life is 36 months

shortcoming

- Corrosive to certain metals
- Can have a strong odor
- Combustible

Similarities and differences with similar products

Dabco NEM is similar to other tertiary amine-based foaming catalysts in that it promotes the urea (water-isocyanate) reaction. However, it has a number of advantages over other products, including its use in a variety of applications, industry standard status for soft foams, and ability to be combined with trimer catalysts.

Precautions for Use

- Wear gloves and safety goggles when handling Dabco NEM.
- Avoid contact with skin and eyes.
- Keep away from heat sources and open flames.
- Store in a cool, dry place.
- Dispose of it properly according to local regulations.

Shelf life:

Remain unopened for two years

Storage and Transportation:

Should be sealed, stored in a dry cool ventilated warehouse

Packaging:

200KG/ barrel storage: It is recommended to store in a dry and cool area with proper ventilation. After the original packaging, please fasten the packaging cover as soon as

possible to prevent moisture and other substances from mixing and affecting the product performance. Do not inhale dust and avoid contact between skin and mucous membrane. Smoking, eating and drinking are prohibited in the workplace. Shower and change after work. Store contaminated clothes separately and use them after washing. Practice good hygiene.

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