Technical Information

DABCO® NE 320

Description

DABCO® NE 320 is an emission optimized amine that promotes the blow (water-isocyanate) reaction for the manufacturing of all types of water-blown flexible polyurethane foam.

Key performance benefits

- High efficiency blow catalyst
- Reduced foam odor
- Low VOC amine catalyst
- Reduced emissions in foam production environments
- Produces fine, regular celled foam
- Equivalent foam physical properties versus industry standard
- Optimized to pass vinyl staining and windshield fogging tests
- Excellent master batch stability

Typical properties*

Appearance	Colorless liquid
Viscosity at 25 °C	9.2 mPa·s
Density at 21 °C	0.905 g/cm³
Calculated OH number	276 mg KOH/g
Flash point	124 °C
Water solubility	Soluble

* For actual ranges, please refer to the Certificate of Analysis (CoA) / Sales Specification.

Application

DABCO® NE 320 is recommended for use in any water-blown TDI or TDI/MDI high resiliency (HR), viscoelastic foam and TDI/MDI or MDI based, cold-cured molded polyurethane cushioning foam systems. Although, the use of carbon dioxide as an auxiliary blow agent is not recommended.

DABCO® NE 320 is a high purity, fourth generation negligeable emission (NE) blow catalyst that binds chemically into the polyurethane foam matrix while maintaining foam properties in MDI or TDI systems. CertiPUR® testing and dynamic headspace analysis according to standard OEM VDA 278 methodology indicates very low emissions from DABCO® NE 320. Therefore, catalyst contribution to foam odor and emissions are significantly reduced.

The catalyst can be used in combination with other low emission catalysts such as DABCO® NE 500, or with conventional co-catalysts to lower emissions and odor.

Vapor pressure measurements have indicated that this catalyst is significantly less volatile than the current industry standards, which means lower volatility during in catalyst handling on the foam production line.

DABCO® NE 320 is compatible with other commonly used polyurethane catalysts and additives and is readily miscible with polyols and polyol/water mixtures.

Common use levels of DABCO® NE 320 are in the range of 0.1 and 0.2 parts per 100 parts of polyol for MDI systems and in the range of 0.15 and 0.2 parts per 100 parts of polyol for TDI systems. The optimal concentration will depend on specifics of the formulation.

Storage recommendations

- Shelf life: minimum 12 months. For exact date of expiration, please consider CoA.
- Storage conditions: dry and cool place in factory-packed containers.
- Optimum storage temperature: 10 to 30 °C.

Safety instructions

Please consult the Safety Data Sheet for summary of product hazards, personal protective measures, and emergency release procedures.

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