

PC CAT DBU Catalyst Nitro

Overview:

PC CAT DBU is a tertiary amine-based foaming catalyst that facilitates the urea (water-isocyanate) reaction in a variety of rigid and flexible polyurethane foam applications. It is the industry standard foaming catalyst for flexible foams and is used in TDI-based flexible foam systems such as mattresses, seats and automobiles. It is also used in combination with trimer catalysts in PIR laminate formulations. PC CAT DBU is also used in MDI, TDI/MDI, MDI high resiliency (HR) flexible molding foams, and self-crusting and microcellular systems. It has a shelf life of 36 months.

CAS Number

The CAS number for PC CAT DBU is 6674-22-2.

Synonyms

PC CAT DBU is also known as diazabicycloundecene.

Molecular Formula

The molecular formula of PC CAT DBU is C₁₀H₁₄N₂.

Physical and Chemical Properties

The physicochemical properties of PC CAT DBU are shown in the following table:

Properties Value

Appearance Transparent colorless liquid

Odor Slight ammonia odor

Specific gravity 1.040

Boiling point 200°C

Flash point 100°C

Water solubility Miscible

Solubility in organic solvents Miscible

Characteristics

Promotes urea (water-isocyanate) reaction

Used in a variety of rigid and flexible polyurethane foam applications

Industry standard foaming catalyst for flexible foams

for TDI-based flexible foam systems such as mattresses, seats and automobiles

is used in combination with trimer catalysts in PIR laminate formulations

is also used in MDI, TDI/MDI, MDI high resiliency (HR) flexible molded foams as well as self-crusting and microcellular systems

has a shelf life of 36 months

Applications

flexible polyurethane foams

cast-in-place polyurethane systems

PIR laminated paperboard

TDI, TDI/MDI, MDI High Resilience (HR) Flexible Molded Foam

Self-crusting foam

Microcellular foam

PC CAT DBU

Full name: 1,8-diazabicyclo[5.4.0]undec-7-ene

CAS: 6674-22-2

Chemical formula: C₉H₁₆N₂

Relative density: 1.018

Melting point: -70°C

PC CAT DBU Physical Properties:

PC CAT DBU is a site-resistant amidine with a colorless or light yellow liquid appearance, possessing a basic nature, its 4% aqueous solution pH=10.98. PC CAT DBU is a thermosensitive amine catalyst whose catalytic activity increases significantly with increasing temperature. In organic synthesis, PC CAT DBU is used as catalyst, ligand and non-nucleophilic base.

Applications:

The main use of PCCAT DBU is as an excellent organic base deacidifier

for synthesis, and it can also be used as a rust inhibitor and can be formulated as a high slow corrosion inhibitor.

PCCAT DBU can also be used as a catalyst, in the polyurethane industry PC CAT DBU is a catalytically active low odor gel catalyst, which can be used in polyurethane foam, adhesives, elastomers, coatings, etc. PC CAT DBU can also be used as an epoxy resin anhydride curing accelerator.

PC CAT DBU derivatives:

PC CAT DBU derivatives are diverse and can be used in many fields such as polyurethane foam, adhesive, elastomer, epoxy potting compound, composite material, rubber synthesis, etc.



Package

Packed in clean, dry, sealed and leak-free special plastic drums with a net weight of 20kg/25kg/180kg per drum.

Storage and transportation

When transporting Catalyst, it should be strictly protected from rain and staining, carefully and gently stored to prevent leakage from collision with hard objects. When storing Catalyst, it should be stored at room temperature in a ventilated and dry warehouse, avoiding humid environment, and the storage temperature should be kept below 25°C, avoiding sunlight as much as possible, and away from water and heat sources. To prevent moisture absorption and oxidation, it is recommended to fill the container with nitrogen.

Shelf life

Under proper storage conditions, the shelf life is 6 months from the date of manufacture, after which the product can be used after retesting.

Safety Information

Catalyst is somewhat toxic and should be rinsed with soapy water promptly after contact with skin. Staff can wear eye protection or safety glasses for the purpose of eye protection. Eye wash and drenching equipment should be provided near the workplace. When working in places where contact with the product is possible, attention should be paid to personal hygiene and the skin in contact with the product should be washed with washing products before

eating, smoking and leaving the workplace.

Leak handling

Stop spills as much as possible while ensuring safety. If a minor spill is found, treat it with sand or other absorbent material and place it in a clean, dry container for subsequent disposal. If a large spill occurs, the spilled material should be collected for subsequent disposal. Avoid entering groundwater or surface water as the material is not readily biodegradable. All collected spilled material should be disposed of in accordance with local environmental regulations.

Disclaimers

The information and technical advice provided above has been obtained from our reliable sources, however, we make no express or implied warranties with respect to the data provided and make no promises herein. If our products are to be used, we recommend that they undergo a series of tests. The application, use, processing or production of products based on the technical information provided by us is beyond our control and therefore these responsibilities are the responsibility of the user. The condition and method of handling, storage, use or disposal of this product is beyond our control and may be beyond our knowledge, and in no event will we be liable for loss, damage or costs associated with the improper handling, storage, use or disposal of this chemical. For more information, please review the technical safety sheets for our products or contact our marketing services department.

Uses:

Promotes the reaction of hydroxyl functional groups with NCO

Safety Information:

Catalyst is somewhat toxic and should be rinsed promptly with soapy water after contact with skin. Staff may wear eye protection or safety glasses for eye protection purposes. Eye wash and drenching equipment should be provided near the workplace. When working in places where contact with the product is possible, attention should be paid to personal hygiene and the skin in contact with the product should be washed with washing products before eating, smoking and leaving the workplace.

Shelf life.

Keep unopened,two years

Storage and transportation:

Should be kept sealed and stored in a dry, cool and ventilated warehouse

Packaging:

200KG/drum Storage: It is recommended to store in dry and cool area with proper ventilation. Please fasten the lid as soon as possible after the original packaging to prevent the mixing of

other substances such as water and other substances from affecting the product performance. Do not inhale dust and avoid skin and mucous membrane contact. Smoking, eating and drinking are prohibited in the workplace. After work, shower and change clothes. Store contaminated clothes separately and wash them before use. Maintain good hygiene habits.

Technical support and business contacts E-mail: info@newtopchem.com