

Eco-friendly Catalysts for PU Leather Resin

1. Typical Characters:

Model	Colour (Fe-Co)	Density g/cm ³ (25°C)	Viscosity mPa.s (25°C)	Others
AUCAT-RM301	Dark blue liquid	1.061	755 ± 200	With slightly special compound odor, soluble in general PU raw materials, free from restricted heavy metals.
CUCAT-RM50A	≤ 6	1.105	2200 ± 500	
CUCAT-RM70	≤ 8	1.129	150 ± 100	
AUCAT-202	≤ 3	1.060	17600 ± 4000	

2. Environmental protection:

Not contain tin element, polycyclic aromatic hydrocarbons, phthalates and other restricted ingredients, comply with strict international environmental protection regulations. Ideal substitute for organotin catalysts.

3. Features and Advantages:

RM301/RM50A/RM70/202 are new generation of high-efficiency catalysts suitable for solventless resin of synthetic polyurethane leather, with the following features and advantages:

- **Non tin metal: environmentally friendly to meet domestic and international markets.**
- **Thermal sensitivity: suitable for roller coating process, with a long flow period after slurry mixing and fast curing after high temperature.** Solve the problems of the general catalyst system, such as too fast viscosity rise in the early stage, poor material fluidity, and slow post curing, and shorten the curing time at high temperature (130 °C).
- **It has little impact on the tear strength and elongation after film formation, solving the problem of finished leather cracking.** Compared with amine catalysts commonly used to promote gel, it can reduce side reactions and improve toughness and tear resistance.
- **Formula is flexible with combination of main and auxiliary catalyst.** RM301, RM50A and RM70 are both highly active thermosensitive main catalysts, which can respectively be used in combination with auxiliary mild catalyst 202. The basic method is to determine the amount of main catalyst based on the allowable flow time after mixing, and to determine the amount of auxiliary catalyst based on a reasonable solidification molding time.

4. Application:

Used for various polyurethane coatings, sealants, adhesives, elastomers, etc. that require a long flow period after mixing two components and rapid solidification after heating, especially suitable for solventless MDI 2K PU system.

Recommended for solventless MDI 2K PU slurry in leather industry, adhesive and sealant.

5. User's Guide:

- The combination of "RM50A or RM70 + 202" does not affect product coloring. The combination of RM301+202 can obtain a foam free and denser coating, but it may make the product appear light green (Related to the dosage of RM301, the color effect is minimal when the film thickness is less than 20µm). It is recommended for products with color requirements. The combination of RM301/RM50A/RM70 and 202 can be freely proportioned, with a general recommendation of 1:1-1:5.
- Add the catalysts into the dehydrated polyol (P material) component and stir evenly, which allows the manufacturer of the composite material to pre add catalysts into the P component, ensuring that the catalytic activity does not decrease after long-term storage; It is not recommended to be added into the isocyanate (ISO, material I) component, which may be in risk of gelling.
- The usage amount is related to formula and process factors, it is generally 0.05-0.5% of the weight of P material.
- After normal use, it is important to immediately close the tank opening.

6. Package & Storage:

25kg/200kg in HDPE drum. The unopened shelf life is 18 months from the date of manufacture. After shelf life, it can still be used as qualified product if the catalytic activity is not reduced after testing.

Notes: All recommendation and technical information (whether verbal, written or by way of product evaluations), including any suggested formulations contained herein is provided for information purpose only and does not constitute a legal contract as well as suitable for relating to the third party rights. The conditions of your use and application of our products, technical assistance and information are beyond our control. Therefore, no guaranty or warranty for your evaluation is made. Consequently the user assumes all risks in connection with the use and handling of this product based on our technical information and recommendations, final determination of suitability of this product is the sole responsibility of the user.