CRYSTIC®

SCOTT BADER

CATALYSTS AND ACCELERATORS

Caution: Catalysts and accelerators must not be mixed directly together as they can react with explosive violence.

Catalysts

Catalysts for use with polyester resins are usually organic peroxides. These are supplied as either paste or liquid dispersions in plasticiser, or as powders in inert filler. Scott Bader offers the following catalysts:

Catalyst Powder B

This is a powder containing 50% Benzoyl Peroxide. It is used alone in hot curing formulations or in conjunction with a tertiary amine (Accelerator D) for specialised fast, cold curing formulations.

Catalyst Paste H

This is a paste dispersion of Cyclohexanone Peroxide. It is used in cold curing formulations in conjunction with cobalt accelerator where a more gradual cure than that given by Catalyst M, is required.

Catalyst M

This is medium reactivity Methyl Ethyl Ketone Peroxide. It is used in cold curing formulations in conjunction with cobalt accelerator where medium gel times and medium hardening rates are required.

Catalyst O

This is low reactivity Methyl Ethyl Ketone Peroxide. It is used in cold curing formulations in conjunction with cobalt accelerator where a longer gel time is required. This catalyst is especially suitable for use in tropical climates.

Accelerators

Most polyester resins are now available pre-accelerated but some still require a separate accelerator addition. Many chemical compounds will act as accelerators for polyester resins but those most commonly used are based on cobalt soaps or tertiary amines. Accelerators are supplied in liquid form. Scott Bader offers the following accelerators:

Accelerator E

This is a 0.4% solution of cobalt soap dissolved in styrene. Recommended addition levels are between 1% and 4%.

Accelerator G

This is a 1.0% solution of cobalt soap dissolved in styrene. Recommended addition levels are between 0.5% and 2.0%.

Accelerator R
This is a 6% solution of cobalt soap dissolved in styrene. It is used where large accelerator addition levels are required to minimise dilution of resins.

Accelerator W
This is a 0.4% cobalt accelerator, which also contains wax. It is designed for use with air-inhibited resins. Addition levels should be between 1% and 4%.

Accelerator D
This is a solution of amine dissolved in styrene. It is normally used in conjunction with Benzoyl Peroxide catalyst to achieve rapid cure at room temperature (18°C – 20°C).

D 3726A
This is a polymeric amine solution. It is used in conjunction with Catalyst Powder B to give very fast cure in specialist moulding applications such as cold press moulding.

Storage
Catalysts should be stored in the dark in their original, closed containers. The storage temperature should not exceed 20°C. Ideally, containers should be opened only immediately prior to use. If recommendations are followed, a storage life of 3 months may be expected.

Cobalt accelerators should be stored in the dark in their original, closed containers. The storage temperature should not exceed 20°C. Ideally, containers should be opened only immediately prior to use. If recommendations are followed, a storage life of 6 months may be expected.

Amine accelerators should be stored in the dark in their original, closed containers. The storage temperature should not exceed 20°C. Ideally, containers should be opened only immediately prior to use. If recommendations are followed, a storage life of 6 months may be expected for Accelerator D and 1 Year for D 3726A.

Packaging
Catalysts are available in 5kg and 25kg containers.
Cobalt accelerators and amine Accelerator D are available in 4kg and 20kg containers.
Amine accelerator D 3726A is available in 25kg and 200kg containers.

Health & Safety
Please see separate Material Safety Data Sheets.

- A further range of Akzo Catalysts and Accelerators are also available.

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