

## PERGAQUICK A 150

**Chemical Name:**

N,N-Di-(2-hydroxy-ethyl)-p-toluidine technically pure

**Application:**

PERGAQUICK-Amine accelerators are recommended in combination with Dibenzoyl peroxide (PEROXAN BP) for curing of unsaturated polyester resins at room temperature or slightly elevated temperatures.

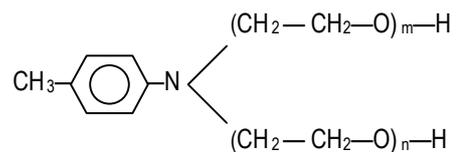
The shortest curing times for the system Dibenzoyl peroxide / Amine accelerator will be obtained at room temperature. Therefore, this system is preferred in case short demoulding times are required, e.g. for cold pressing.

PERGAQUICK-Amine accelerators and Dibenzoyl peroxide are used for curing of putties, polyester concrete and final parts made from glass fiber reinforced polyester resin which are produced by hand lay-up, fiber spray-up, cold pressing or filament winding.

PERGAQUICK A 150 is a non-toxic Amine accelerator. PERGAQUICK A 150 hardly causes colouring of the final product.

**Physical and chemical properties:**

Appearance:	clear brown liquid
Content of reactive mat.:	235 mg KOH/g
Molecular weight (active substance):	217 g/mol
Density:	1,10 g/cm <sup>3</sup>
Bulk density:	- kg/m <sup>3</sup>
Storage Temperature:	max. 20 °C
Flash point:	approx. 210 °C
Stability of activity:	12 to 24 months

**Chemical structure:**

**Standard package:**

25 kg Container

Other types of packaging on request.

**Handling and storage:**

For any information on

- first aid measures,
- fire fighting measures,
- accidental measures,
- storage,
- handling,
- stability and reactivity
- toxicological information,
- ecological information,
- disposal considerations,
- transport information,
- specific regulations

please refer to the safety data sheet.

Contact our product marketing and application department under +49 (2871) 99 02 13 for a current version of the safety data sheet.

## PERGAQUICK A 150

### Application:

Utilization and dosage of Amine accelerators for cold curing processes allows variation of gel time and cure times over a broad range.

The system Dibenzoyl peroxide / Amine accelerator allows curing at ambient temperature of 0°C. But it is essential to store the final parts at 20°C or preferably higher temperature afterwards for several weeks to get a good curing process.

PERGAQUICK A 150 is a non toxic Amine accelerator, which can be an alternative for PERGAQUICK A 100 (N,N-Dimethyl-p-toluidine, technically pure), PERGAQUICK A 200 (N,N-Dimethylaniline, technically pure), PERGAQUICK A 300 (N,N-Diethylaniline, technically pure) in almost all applications.

PERGAQUICK A 150 is a technically pure product. Dilute this pure product before use or simply ask for our 10% solution in phthalate (PERGAQUICK A 15).

When curing with the system Dibenzoyl peroxide / Amine accelerator at ambient temperature, the dosage of Amine accelerator should not be below 1% of a 10% Amine accelerator solution.

The following table shows the influence of different Amine accelerators on gel time and cure time.

Accelerator	Dosage	Gel time	Cure time	Temperature at start of the reaction $T_R$	Peak temperature $T_{max}$
PERGAQUICK A 100	0,2%	5 min	8 min	25 °C	138 °C
PERGAQUICK A 150	0,2%	8 min	12 min	25 °C	150 °C
PERGAQUICK A 200	0,2%	13 min	19 min	25 °C	142 °C
PERGAQUICK A 300	0,2%	80 min	-	-	-

Gel times and Cure times of a standard polyester resin cured with 2 wt.-% PEROXAN BP-Powder 50 W and different Amine accelerators

Amine accelerators may colour the final products yellowish, if final parts are exposed to sunlight.

The curing of surfaces in contact with ambient air can be delayed due to the inhibition of the curing process by oxygen. These surfaces remain sticky. Humidity as well as several fillers and pigments however do not influence the curing performance of the system Dibenzoyl peroxide/ Amine accelerator.

### Dosage:

As a general guide line the dosage relates to 100 % unsaturated polyester resin plus Styrene, but not including fillers or other additives:

PERGAQUICK A 150    0.1 % by wt. - 0.2 % by wt.

The dosage may vary, depending on the required gel and demoulding time, the processing temperature, the thickness of the laminate and the activity of the polyester resin.

### Shelf life of the unsaturated polyester resin plus PERGAQUICK A 150:

At ambient temperatures the shelf life of PERGAQUICK A 150 in the polyester resin is decreased to about a couple of days to weeks because of the Amine content. However, the shelf life may vary with the batch size, the activity of the polyester resin, the storage temperature and the dosage.

The above mentioned guide lines do not cover all fields of application and processing of our product. If you need any additional information, please do not hesitate to contact our product marketing and application department (Phone: +49-2871-9902-13).

We consider the information given in this technical data sheet to be reliable. However it is not to be taken as a recommendation for use in violation of any patent given without any guarantee.