degussa.
Catalysts & Initiators

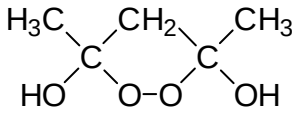
Technical Data Sheet

Polyester Curing

Ketone peroxides (Ambient temperature)

CUROX® A-200

Acetyl acetone peroxide
CAS#37187-22-7
Liquid mixture



Description:

Colourless, mobile liquid, consisting of peroxides based on acetyl acetone, essentially de-sensitised with diacetone alcohol. This ketone peroxide is used as an initiator (radical source) in the curing of unsaturated polyester resins. Main application: curing of thin-wall moulded parts at ambient temperature in combination with cobalt accelerators.

Technical Data:

Appearance	colourless liquid
Active oxygen	ca. 4.2% w/w
De-sensitising agent	diacetone alcohol
Densitiy at 20°C	ca. 1.1 g/cm^3
Viscosity at 20°C	ca. 18 mPa•s
Miscibility	miscible with alcohols, phthalates
Critical temperature (SADT)	ca. 70°C
Cold storage stability	liquid to below -5°C
Recommended storage temperature	5 to 25°C
Maintenance of activity at 25°	..> 6 months

Application:

POLYESTER CURING: Curing agent for all UP resin types at ambient temperature in combination with cobalt accelerators. Standard dosage level: 1-3% as supplied, with 0.5-2% of a 1% cobalt solution.
"Shelf life" (gel time of resin + peroxide) usually only a few hours, depending on temperature and resin type. "Pot life" (gel time of resin + peroxide + accelerator) relatively short, but may be prolonged by adding Inhibitor TC-510.

CURING PERFORMANCE: Strong evolution of heat, therefore short mould release times and very good mould release factors ($f_{MR} = t_{MR}/t_{gel}$). Even at low ambient temperatures relatively rapid curing, especially in combination with Accelerator CA-12. Some fillers, pigments and stabilisers can disturb or even prevent the curing procedure. Occasionally, greenish or mottled discolouration can be observed in finished parts, post curing above 60°C may then be applied.

PROCESSING METHODS: Suitable in particular for curing thin-wall moulded parts using various processes, such as hand lay-up, spray lay-up, vacuum and injection moulding, wet press moulding, centrifugal casting (pipes), continuous impregnating (corrugated sheets). Thus, the product is very versatile.

SPRAY EQUIPMENT: Use spray equipment in accordance with manufacturer's instructions. Ensure all safety devices are operational. Do not clear gun by spraying MEKP into the air.

Activity:

"Cobalt Curing" of 2 mm GRP laminates at 23°C					
Formulation (parts by weight)					
Highly reactive resin type (OPA)	100	100	100	100	100
CUROX® A-200	2	2	2	1	1
Accelerator C-101	2	1	0.5	1	0.5
Curing data					
Gel time (t_{gel}) at 23°C [min]	4	7	12	12	20
Mould release time (t_{MR}) at 23°C [min]	7	12	22	20	35
Mould release factor ($f_{MR} = t_{MR}/t_{gel}$)	1.8	1.7	1.8	1.7	1.8

Further information on suitable curing agents for unsaturated polyester resins is given in our application brochures on this subject.

Contact:

http://www.degussa-initiators.com