

CRYSTIC U 952 TPA

TECHNICAL DATA

Polyester Resin Blend

Introduction

CRYSTIC U 952 TPA is an unsaturated polyester resin, pre-accelerated and thixotropic. It is composed of a mixture of various final batches of conventional or low styrene emission resins, of orthophthalic, isophthalic, and NPG isophthalic quality.

Applications

CRYSTIC U 952 TPA is not a regular manufacturing product; it is available occasionally during remixing campaigns. It is suitable for general applications where mechanical strength or chemical resistance are not essential criteria.

Formulation

For room temperature polymerization, the following formulation is recommended as a starting point:

CRYSTIC U 952 TPA: 100 parts

Catalyst M: 2%

Catalyst M is a methyl ethyl ketone peroxide such as Butanox M50 from AKZO.

Liquid State Properties (Indicative Values)

Result Description	Result	Units	Acceptance Range
Polyester Resin Aspect	Accepted Thixo Blue With Colour Change	Thixo	Colour Change
Solid Content Polyester Resin	56.2	%	$\geq 55.0 \leq 60.0$
RHEOMAT Visco @ 25°C 37,35 s ⁻¹	2.9	dPa.s	$\geq 2.5 \leq 3.5$
BROOKFIELD Visco LVF @ 25°C Sp62-6Rpm	14.00	dPa.s	$\geq 13.00 \leq 17.00$
Gel Time @ 25°C 1ml Cat M	28.0	Min	$\geq 22.0 \leq 28.0$
Water Content	0.096	%	$\geq 0.000 \leq 0.300$

Storage

The resin in liquid state must be kept away from flames and heat sources. Store in suitable containers and protect from light. Avoid the risk of water infiltration.

Hygiene and Safety

Essential protective measures:

- Proper storage.
- Good stock rotation.
- Adequate ventilation of facilities.
- Local extraction when vapor concentrations are high.
- Proper maintenance of facilities.
- Use of masks in case of projection or work in confined spaces.
- Informed and trained personnel.

Points to Monitor

Above certain levels, solvent or monomer vapors can present risks to health and safety.

For safety, the main risks are fire and explosion.

For health, the risks come from the accumulation of vapors in the workshops when they exceed exposure limit values. For these limits, refer to the Ministry of Labor circulars.

Symptoms of vapor overexposure include:

- Dry and irritated throat
- Cough
- Headaches
- Drowsiness

Liquid resins, like their vapors, can cause skin irritation in sensitive individuals.