

CRYSTIC S15-6

Flexible Unsaturated Polyester

Introduction

CRYSTIC S15-6 is a very flexible unsaturated polyester resin based on adipic acid.

Application

CRYSTIC S15-6 can be used alone or in combination with other polyester resins for the manufacture of flexible products. Impregnating resins particularly isophthalic resins can be flexibilised by addition of **CRYSTIC S15-6** without any significant impact on the chemical resistance properties.

Features and benefits

Features

Low styrene content
High elongation
Low volume shrinkage

Benefits

Low styrene emission
Improvement of the impact strength
No risk of micro-cracks

Formulation

CRYSTIC S15-6:	100 parts
Catalyst M :	1 to 2 parts
Accelerator E :	1 to 4 parts

Catalyst M is a Méthyl Ethyl Ketone Peroxide at 50% such as the Butanox M 50 from AKZO.
Accelerator E is a cobalt octoate at 0.4 % active cobalt. Catalyst and accelerator should not be mixed directly together as they will react with explosive violence.

Gel Time

The ambient temperature, the quantity and the type of catalyst and accelerator will control the gel time of the resin. The following table shows the gel time in minutes at 20°C of 100 parts of **CRYSTIC S15-6**

Parts of cata M	1	2
Parts of acc E		
4	14	12

Curing should not be carried out at temperatures below 15°C. Resin must reach ambient temperature before application.

Gel Time

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Additives

Since certain pigments, fillers or extra styrene may affect properties of **CRYSTIC S15-6**, their effect should be evaluated before addition to the formulation. The following cold curing formulation is recommended:

Typical properties

On liquid resin :

Viscosity at 25°C (Rhéomat 37,35 sec ⁻¹)	dPas	4 – 6
Specific gravity at 25°C		1.15
Volatile content	%	20 – 24
Aspect		Light yellow
Stability in dark at 20°C	Months	6
Gel time at 20°C with 100 parts of Resin + 1g of cat M + 2,5 parts Acc E	min	18 - 22

Packaging

CRYSTIC S15-6 is supplied in 225 kg or 1100 kg containers. Bulk supplies can be delivered by road tanker.

Storage

CRYSTIC S15-6 when liquid must be kept away from any fire source. It should be stored under cover in the dark in the container in which it is supplied. Storage temperatures should not exceed 20°C. Avoid the proximity of heat and water infiltration risk.

Health and Safety

Please see separate Health and Safety data sheet.

All information is given in good faith but without warranty. We cannot accept responsibility or liability for any damage, loss or patent infringement resulting from the use of this information.

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