



# Technical Data Sheet

# ipox<sup>®</sup> MR 3012/MH 3122 system

- · Two component epoxy system
- · Colourless laminating resin system
- · Variable mix ratio, accordingly flexible/hard product
- Chemical base:
- · aliphatic reactive diluent
- · cycloaliphatic amine hardener

# **TYPICAL APPLICATIONS**

- · Colourless casting
- · Laminates
- $\cdot$  3D labels and logos
- $\cdot$  Flexible and hard products

## **TECHNICAL DATA\***

	PARAMETER	UNIT	VALUE	METHOD
ipox <sup>®</sup> MR 3012	Epoxy Equivalent Weight [EEW]	g/eq.	140 - 150	ipox 001
(Component A)	Epoxy value	eq./100 g	0,67 - 0,71	ipox 001
	Viscosity** [25 °C]	mPa⋅s	160 - 200	ipox 010
	Refractive index [n <sub>D</sub> , 25°C]	-	1,476 - 1,482	ipox 016
	Colour number	Gardner	max. 1	EN 1557
	Colour number	Hazen	max. 50	EN 1557
	Density [25 °C]	g/cm <sup>3</sup>	~1,22	ipox 019
ipox <sup>®</sup> MH 3122	H-Equivalent Weight [HEW]	g/eq.	60	
(Component B)	Amine value	mg KOH/g	464 - 490	ipox 003
	Viscosity** [25 °C]	mPa⋅s	80 - 120	ipox 010
	Refractive index [n <sub>D</sub> , 25°C]	-	1,494 - 1,500	ipox 016
	Colour number	Gardner	max. 0,3	EN 1557
	Colour number	Hazen	max. 50	EN 1557
	Density [25 °C]	g/cm <sup>3</sup>	~0,94	ipox 019

typical data; please ask for the specifications

\* Brookfield R/S-CPS cone/plate rheometer

#### **TYPICAL SYSTEM PROPERTIES\***

Flexible system	PARAMETER Mix ratio (A:B)	<b>UNIT</b> weight	<b>VALUE</b> 100:25	METHOD
	Viscosity** [25 °C]	mPa⋅s	~220	ipox 010
	Gel time*** [100 g, 25 °C]	min	~380	ipox 024
Hard system	Mix ratio (A:B)	weight	100:40	
	Viscosity** [25 °C]	mPa⋅s	~200	ipox 010
	Gel time*** [100 g, 25 °C]	min	~300	ipox 024

Product flexibility/hardness\*\*\*\* adjusted by varying the amount of hardener. The minimum mix ratio (A:B by weight) is 100:25, the maximum is 100:40.

Mix ratio (A:B)	Final Shore A	Final Shore D
100:25	78	30
100:30	98	64
100:35	99	84
100:40	99	86

\* typical data; please ask for the specifications

\*\* Brookfield R/S-CPS cone/plate rheometer

\*\*\* GELNORM Gel Timer-TC

\*\*\*\* ipox 025 method

# DIRECTION FOR USE

The system "A" and "B" component mix perfectly in a suitable container to the specified mass fraction. Further dilution is not recommended.

The mold, which can be made of metal, wood, gypsum, plastic should be covered with mold release agent. The surface pores of wood and gypsum molds must be sealed off.

No special precautions need to be taken at temperatures between +15 °C and +30 °C.

For the good quality of the product the suitable and equable temperature and humidity are very important.

The handling and processing must be performed by appropriately trained and professional users. For further information please contact our representative.

#### STORAGE

ipox<sup>®</sup> MR 3012 and MH 3122 are at least 12 months stable in the original can. Storage at higher temperatures and exposure to sunlight will increase the colour number. The resin may crystallize at low temperatures. This is reversible by heating the resin up to 50 °C and thoroughly stirring before use. Keep cool and dry.

# PHYSIOLOGY AND LABORATORY SAFETY REGULATIONS

For additional information please consult the corresponding product safety data sheets.

Any technical recommendations given by us whether orally or in writing are not binding on us, also

with regard to any rights of third parties. Prospective users should conduct their own trials to

determine whether our products are suitable for the intended purpose. Our liability is governed by

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our general conditions of sale.