

# Giralithe® Ditra GL 2109-10 XP white 3010 flame resistant, without halogen

Technical sheet 921/250-d  
Edition 06/12

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## Introduction

**Giralithe® Ditra GL 2109-10 XP white 3010** is a giralised, highly filled, preaccelerated, self extinguishing, unsaturated polyester resins with a low viscosity.

It was especially developed for applications in common transportation engines and vehicles. The halogen free resin develops only few smog imissions in case of fire.

**Giralithe® Ditra GL 2109-10 XP white 3010** is suitable for nearly all kind of application techniques, hand laminating, spraying, injection moulding and especially for vacuum injection moulding.

## 1 Properties of liquid resin

The information contained in this section are indicative only

### 923.4.1.3010

#### Giralithe® Ditra GL 2109-10 XP white 3010

Color	White 3010
Density 20°C	1,49 g/cm <sup>3</sup>
Viskosity/Brookfield 23°C	500 - 800 mPa.s
Brookfield RV Spindle 3/50 UPM	
Reaktivty	medium
UV-Stabilisation	none
Monomer content	18 – 20 %
Dissolution	Not allowed
Flashpoint	> 23°C - < 55°C
Shelf life	3 months in the dark, in suitable closed containers. Recommended storage temperature should be less than 20°C. Ideally containers should be opened only immediately prior to use. The storage stability is only guaranteed, if the filled resin is stirred up at least every 30 days.

## 2. Properties of cured resin

The indications below are reference values

Hardness Barcol 934-1, 20°C	60	EN 59
Heat deflection under load	89°C	ISO 75 A
Tensile strength	30 MPa	ISO 527
Elongation at break	0.4 %	ISO 527
Tensile modulus	7700 MPa	ISO 527
Flexural strenght	48 MPa	ISO 178
Flexural modulus	8600 MPa	ISO 178
Stretch at break	0,6%	ISO 178
Glass transformation temp.	107°C	ISO 6721-7
Dynamic shear modulus G'/RT	4700 MPa	ISO 6721-7

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zertifiziert nach  
ISO 9001 / ISO 14001

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- 3. Application** The following instructions are intended to be followed and interpreted by professional persons.
- Activator system** **Giralithe® Ditra GL 2109-10 XP white 3010** being a charged resin system it has to be agitated intensively prior to any use. Please refer to the referring application guide.
- Giralithe® Ditra GL 2109-10 XP white 3010** is preaccelerated and has especially been developed for curing at workshop temperature (not under 17°C). The recommended catalysts are Methylethylketonperoxides
- Geltime** 100 g **Giralithe® Ditra GL 2109-10 XP white 3010** Geltime in insulated cup at 23°C
- Addition of 1.50% Peroxid MEKP** (PEROXAN ME-50L or ME-60L)
- ⇒ **18 - 23 Minuten**
- The room temperature must not be below 17 °C during processing . To achieve a longer gel time , the addition of inhibitor is recommended .
- Precaution** Never mix catalyst and accelerator directly since they can react with explosive violence. These components have to be added sequently
- 4. Separation problems** If parts are moulded with or without Gelcoat, separation problems can arise. Kindly contact our specialists for detailed recommendations in your specific application  
We recommend to check the suitability of the release agent
- 5. Flame resistance standards** Under ideal circumstances, the following classifications may be achieved.

<p><b>European Classification:</b> EN 45545-2 R1 (with NUVOPOL Gelcoat 37-03 TGP)</p>	HL 3
<p><b>German Classification DIN 5510-2</b> (Laminat 3mm) Combustibility Class Smoke classification Dropping Class (with NUVOPOL Gelcoat 80-50 TG)</p>	S 4 SR 2 ST 2
<p><b>French Classification</b> NF P 92-501 (with NUVOPOL Gelcoat 80-52 TGP) NF F 16-101 (with NUVOPOL Gelcoat 80-52 TGP) NF X 10-702/NF X 70-100</p>	M 2 F 1
<p><i>Because of the abundance of possible influences with the processing and application of our products these do not release users from own examinations and attempts. Therefore no guarantees and responsibilities can be derived from these given data..</i></p>	

# Giralithe<sup>®</sup> Ditra GL 2109-10 XP white 3010 flame resistant, without halogen

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## 6. Safety references

The above mentioned products are exclusively intended for industrial use only. Users must have the appropriate knowledge concerning handling and industrial safety. During storage and handling appropriate laws, warning references on the bundles as well as the safety data sheets have to be respected mandatorily.

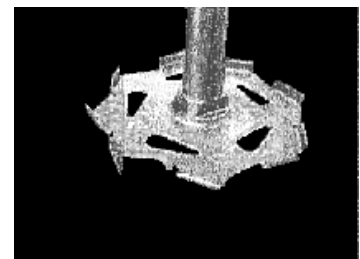
## Processing instructions

The content of 1 steel drum of 250 kg has to be agitated during 5 min with a dissolver of ab. Ø 220 mm diameter at approximately 800 rpm. If containers of different size are used, the diameter of the dissolver has to be adapted.

The homogeneity has to be monitored, it is very important that, mainly on the bottom of the container, there are no agglomerates anymore.

Sequently, depending on resin quantity, catalyst is added

- Add homogeneously during permanent stirring the requested quantity of catalyst



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