

Technical Information

Polimal® VE-2MM

DATE: 21.08.2024

Polimal® VE-2MM

This is an unaccelerated, medium reactive epoxy based vinyl ester resin.

APPLICATION

Polimal® VE-2MM is designed for production glass fiber reinforced compositions and/or mineral fillers with high chemical and thermal resistance.

Cured unreinforced Polimal® VE-2MM is classified in group **7A according to EN 13 121-1**.

PACKAGING

220 kg, 1 100 kg

SHELF LIFE

3 months from the date of manufacture.

PROCESSING CONDITIONS

The resin should be mixed before use. Good curing requires ambient temperature above 18°C and low air humidity. The curing system under productions conditions should be tested.

In order providing optimal mechanical and resistance parameters is recommended to use glass veil with a grammage of 30g/m² made of C-glass as first laminate layer and post-curing at elevated temperature e.g. couple hours at 80°C. Post-curing is especially recommended if parts are intended for contact with chemicals.

It is required to mix the resin in the tank or in the unit packages before using.

STORAGE

Polimal® VE-2MM should be stored in closed packaging in a dry, cool place, protected from sunlight and suitable for storage of flammable materials at temperatures not exceeding 25°C.

SPECIFICATION

Parameter	Unit	Value
Viscosity at 25°C acc. to ISO 3219	mPa s	300 ÷ 400
Gel time at 25°C acc. to ISO 2535	min	15 ÷ 35
Flexural strenght acc. to ISO 178	MPa	130
Tensile strength acc. to ISO 527	MPa	75
Tensile modulus acc. to ISO 527	MPa	3500
Elongation at break acc. to ISO 527	%	3,5
Heat deflection temperature (HDT) acc. to ISO 75	°C	95
Barcol hardness acc. to ASTM D 2583	°B	35

Gel time with 0,6% Co1% + 1,2% DMA10 + 2% Luperox® K-1S (MEKP)

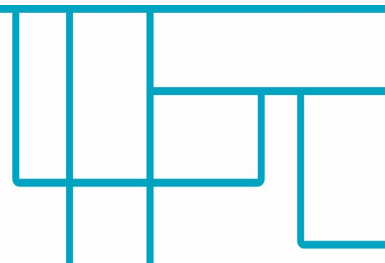
Mechanical parameters refer to unreinforced resin cured for 24 hours at room temperature and post-cured for 4 hours at 80 °C.

Luperox® is the trade name registered for products of **ARKEMA** company.

Polimal® is the trade name reserved for unsaturated polyester resins produced by **SarZYNA Chemical sp. z o.o.**

The data and suggestions contained in this material are based on our own research and considered by us to be reliable. However, we cannot accept any liability for actions and losses resulting directly or indirectly from the use of the products. The user should check the quality, safety and features of the product before applying it.

ATTENTION: This information does not replace the Safety Data Sheet or the Technical Sheet which are master documents available upon request.



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CHEMICAL RESISTANCE TABLE

Assessment of chemical resistance of non-reinforced resin to undermentioned chemicals was carried out under laboratory conditions according to PN-78/C 89067 standard. Test specimens have seasoned for 24 hours at temperature 23°C and the for 4 hours at temperature 80°C.

Chemical	Concentration	Temperature, °C
Nitric acid	25%	50
Nitric acid	60%	Not recommended at any temperature
Phosphoric acid	75%	80
Hydrochloric acid	20%	80
Hydrochloric acid	38%	45
Sulphuric acid	10%	90
Sulphuric acid	70%	75
Formic acid	25%	75
Acetic acid	15%	90
Acetic acid	25%	90
Acetic acid	50%	70
Acetic acid	80%	45
Aqueous ammonia	25%	25
Hydrogen peroxide	30%	40
Sodium hydroxide	1%	65
Sodium hydroxide	5%	65
Sodium hydroxide	25%	65
Sodium hydroxide	40%	65
Sodium hypochlorite	1-20%	50
Iron(III) chloride	All	90
Sodium chloride	All	90
Iron(III) sulphate	All	90
CuSO ₄ /H ₂ SO ₄ Electrolyte	20%	65
Ethyl alcohol	15%	50
Ethyl alcohol	45%	50
Carbon tetrachloride	100%	25
Phenol	100%	Not recommended at any temperature
Styrene	100%	Not recommended at any temperature
Acetone	100%	Not recommended at any temperature
Gasoline unleaded, non-containing methanol	100%	50

