MS SPECIAL N

Revision: 31/01/2025

TECHNICAL DATA



TECHNICAL DATA	
Polymers and the curing system:	MS Polymer
Product Declaration:	EN 15651-1 F-EXT-INT-CC - CLASS 25 LM
Consistency:	Pastosa
Application temperature:	+5°C / +35°C
Specific gravity:	1,5 kg/dm³
Shore A Hardness:	25 Shore A
100% Modulus (ISO 8339):	0,35 MPa - <0,6 MPa a -20°C
Tensile Strength (ISO 8339):	0,7 Mpa
Elongation at Break (ISO 8339):	350 – 400 %
Elastic Recovery (ISO 7389):	>70% (da estensione del 100%)
Movement Capability:	± 25%
Tear Resistance (ASTM D 624-73):	7 N/mm
Skin fromation Tim (20°C/50% U.R.):	20 min. ca.
Curing speed (20°C 50% U.R.):	2,5 mm a 24 h.
Adhesion/cohesion at variable temperatures (ISO 9047):	ottimo, nessun distacco
Values given in this table must not be considered as specifications.	





PRODUCT DESCRIPTION

One part, moisture curing sealant based on MS Polymer™

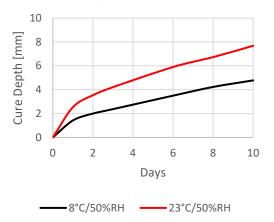
PRODUCT CHARACTERISTICS AND USES

Low modulus, high elasticity and excellent adhesion on a great variety of materials make **MS Special N** suitable for durable sealing of joints subject to movement.

MS Special N shows all the characteristics of MS Polymer[™] technology.

- Solvent and isocyanate free.
- Virtually no shrinkage.
- Flexible at low (-40°C) and high (+100°C) temperatures.
- Neutral curing, odourless.
- Fast curing.
- Overpaintability with all the water based paints usually used in the building industry, and other industrial painting systems. The compatibility should be checked by preliminary trials.
- Excellent adhesion on a large variety of substrates.
- High aging and UV resistance.

A graph of the cross-linking depth as a function of temperature and ambient humidity is shown below.



PROFESSIONAL USES

- Sealing of expansion joints.
- Sealing of window frames (wood, uPVC, aluminium).
- Sealing of partition walls.
- Elastic sealing on components of structures made of different materials such as galvanized steel, aluminium, wood, polyester and most plastics.
- Sealing of metal carpentry.

Fratelli Zucchini S.p.A. Via C. Colombo, 6 44124 Ferrara - Italy Tel. +39 0532 782711 - info@zucchini.it - www.zucchini.it





All recommendations relating to application and use of Fratelli Zucchini S.p.A. products have been given based on Fratelli Zucchini S.p.A. knowledge and experience, for products appropriately stored, handled and applied in suitable conditions, as indicated in their respective Technical Datasheets. The variability of materials, substrates and conditions of use is such that no warranty of their functionality for a specific application can be deducted from this information, written or verbal recommendation or any other type of suggestion offered. Each user has the responsibility to complete adequate evaluations on the efficacy of the materials offered by Fratelli Zucchini S.p.A., of its products, services, recommendations and suggestions for the specific application need, and unst accomplish sufficient testing to ascertain that the final product will be safe and sound for the final intent of the end-user. Fratelli Zucchini S.p.A., therefore, cannot be fit considered liable for any damage, direct or indirect even for possible wrong, incorrect and unfit use of the products.

MS SPECIAL N

Revision: 31/01/2025

LIMITATIONS

- Applications in water continuous immersion have to be double checked with Fratelli Zucchini S.p.A. Technical Area.
- Not suitable for joints in swimming pools and adjacent areas that are in continuous contact with pool water.
- It must not be used for items that come in contact with food, or with materials that ooze oily substances or plasticisers.
- Furthermore, it must not be applied in completely enclosed spaces, with no exposure to atmospheric humidity.
- Do not use in extreme temperature conditions, or on damp, frozen, contaminated surfaces.
- Do not use on excessively acidic or basic substrates
- Not to be used in contact with natural copper. In case use our silicone sealants; contact the Technical Service of Fratelli Zucchini S.p.A.

APPROVALS

- MS SPECIAL N was tested and ranked second by EUROFINS: Indoor Air Comfort GOLD 6.0 of February 2017.
- Declaration of product: EN 15651-1: F-EXT-INT CLASS 25 LM (DOP N° 28 07 5006044 – NB0757)
- **MS SPECIAL N** has been examined by **ISEGA** and judged suitable for sealing walls and floors in manufacturing units where foodstuffs are processed, with the exception of direct contact between food and sealant

METHOD OF USE

Adhesion and surface preparation: MS SPECIAL N has a very good primerless adhesion on anodized aluminum, galvanised steel, glass uPVC, fibreglass provided they are free from grease.

On aluminum, galvanised steel, painted surfaces, porous surfaces like concrete and bricks, the use of a suitable primer can improve adhesion of the sealant:

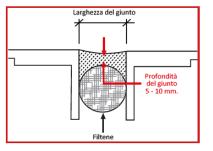
- **Primer WPX** for metals, painted surfaces.
- **Primer 13** for metals, painted surfaces.
- Primer LM/BV for porous surfaces.

Application of sealant: MS SPECIAL N can be extruded by using an hand operated gun or an air gun in a temperature range between $+5^{\circ}C/+35^{\circ}C$. Apply the sealant extruding continuously and practise a suitable pressure against the sides of the joint.

Tooling should be carried out within 10-15 minutes from the application.

Joint dimensions (see picture): a well dimensioned joint ensure an excellent movement accommodation for the sealant and so long life and efficiency of the joint.

Joints designed to accommodate movement must be



ovement must be compatible in size and shape with the elongation capacity of the sealant.

Rectangular sections with joint depth lower than width and two-side adhesion reduce the risk of tearing

by severe stress.

For a correct dimensioning of a joint section and for avoiding the adhesion to the third side insert into the joint back **Filtene**, a closed cell polyethylene foam backer rod for joints.

Paintability: please note that overpainting can modify the elastic properties of the sealant surface and so its ability to accommodate the movements of the joint.

The compatibility of the sealant with the paint has to be previously verified by test.

It is recommended to apply the paint when the sealant is completely cured. It assures the best results, also esthetically.

Solvent wiping: dirty tools can be solvent wiped with **Solvente ST/512**. After curing **MS SPECIAL N** can be removed only mechanically.

SAFETY AND HEALTH

See Safety Data Sheet.

STORAGE STABILITY

- 300 ml. cartridge 12 months from the date of manufacture.
- 290 ml. cartridge 18 months from the date of manufacture.
- 600 ml bag. 18 months from the date of manufacture.

• 25 kg drum 12 months from the date of manufacture. Store the sealed product in the original packaging, in a dry place at a temperature between +5°C and +25°C.

> COMPANY WITH QUALITY SYSTEM

ERTIFIED BY DNV G

The product may become more viscose during storage.



Tel. +39 0532 782711 - info@zucchini.it - www.zucchini.it

All recommendations relating to application and use of Fratelli Zucchini S.p.A. products have been given based on Fratelli Zucchini S.p.A. knowledge and experience, for products appropriately stored, handled and applied in suitable conditions, as indicated in their respective Technical Datasheets. The variability of materials, substrates and conditions of use is such that no warranty of their functionality for a specific application can be deducted from this information, written or verbal recommendation or any other type of suggestion offered. Each user has the responsibility to complete adequate evaluations on the efficacy of the materials offered by Fratelli Zucchini S.p.A., of its products, services, recommendations and suggestions for the specific application need, and must accomplish sufficient testing to ascertain that the final product will be safe and sound for the final intent of the end-user. Fratelli Zucchini S.p.A., therefore, cannot be fit considered liable for any damage, direct or indirect even for possible wrong, incorrect and unfit use of the products.

