



MAXFLEX®

900



TWO-COMPONENT POLYSULPHIDE-BASED ELASTOMERIC JOINT SEALANT WITH HIGH CHEMICAL RESISTANCE FOR PERMANENT IMMERSION APPLICATIONS

DESCRIPTION

MAXFLEX® 900 is a two-component, gun-grade consistency, polysulphide-based joint sealant. It cures chemically at ambient temperature, providing an elastomeric sealant with low elasticity modulus, especially recommended for sealing all kind of joints wherein water immersion and high chemical resistance is required.

For horizontal joints on concrete floors it is also available the pour-grade **MAXFLEX® 900 -F**, with fluid consistency and self-levelling properties for easier application.

APPLICATION FIELDS

- Sealing of joints between in concrete or bricks.
- Joints subjected to permanent immersion in water tanks, channels, irrigation ditches, traps, etc.
- Sealing of joints on concrete floors in warehouses, industrial facilities, etc.
- Sealing of joints subject to contact with chemical compounds.

ADVANTAGES

- Chemical curing process. Polymerisation takes place at the same time in the whole material applied.
- Suitable for vertical joints, up to 30 mm width, without slumping.
- Good adhesion on the most common building materials.
- Due to its elasticity, it does not create internal stress in the joint edges.
- Very high weathering and chemical resistance as well as mechanical properties.
- Once cured, it is a suitable material for water immersion in tanks, swimming pools, etc.

- Easy to apply over dry substrates at temperatures from +5°C to +50°C.
- Flexible from -30°C to +80°C.

APPLICATION INSTRUCTIONS

Surface preparation

Surface must be structurally sound and clean, free of dust, coatings, efflorescences, oil, grease, gypsum or any foreign material that could affect to adhesion. Substrate should be provided with a slight roughness and must be dry. If necessary, clean with mechanical means such as grinding, sandblasting, wire brushing or with non-grease solvents for removing greases and oils.

In order to improve the adhesion, especially on porous surfaces, apply **PRIMER® 900** by brush with a recommended coverage of 0,45 l/m² (Technical Bulletin No. 68). Apply sealant after primer has released the solvent but it is still tacky, i.e. from 30 to 90 minutes. Sealant application time will vary depending on temperature and humidity. If primer gets dry, apply a new primer coat.

To prevent staining the edges of the joints and provide a better finish, use a masking tape on either sides of the joint before applying the primer or the sealant.

Some components of the concrete, as well as the substrate humidity, can react with **MAXFLEX® 900** leading bubbles on surface. A preliminary test on-site will determine the suitability of the sealant or the requirement for the use of a primer such as **PRIMER® 900**.

Dimensions of joints

MAXFLEX® 900 can be used for joints wherein the minimum and maximum width should be about 8 mm and 40 mm, respectively. For general proposes, depth of the sealant should be at least about the half of the width of the joint, with the

exception of under 15 mm joints, where depth and width must be 8 mm. For expansion joints, width of joint should be at least four times than joint movement expected.

To seal deep joints and avoid adhesion on joint bottom, use the closed cell polyethylene backer rod **MAXCEL**® (Technical Bulletin No. 48) with a diameter 25% larger than width joint. To maintain the sealant depth, install the backer-rod by compressing and rolling it into the joint gap. Do not prime on the backer-rod.

Mixing

MAXFLEX® 900 is supplied in 2,5 liters metal drum wherein both unmixed pre-weighed components (black and white) are placed.

Mix mechanically using a slow speed drill (300-400 rpm) equipped with a fork-shaped whisk, during approximately 4-5 minutes, until achieving a homogeneous product in colour and appearance. Mixing must be done with circular motion in both directions coming close to the container walls and bottom, avoiding, as far as possible, trapping of air. Do not mix product until all previous jobs have been completed. The mixed product may be rebottled in cartridges by using a cartridge loader.

Application

Observe the drying time of **PRIMER**® 900 before applying **MAXFLEX**® 900.

MAXFLEX® 900 can be dispensed from a pneumatic cartridge gun or using manual means such as a spatula or a caulking gun provided with a properly sized nozzle, filling the joint from the bottom up.

During application press the nozzle against the joint edges and bottom to prevent air bubbles. For thin joints, sealant should be applied in a single pass from the deepest point to the surface. In wider joints, it should be applied in three steps. First, on each joint edge and then, filling in the centre. For a better finish, sealant may be smoothed with a spatula. Sealant application is finished by removing the masking tape before curing process starts.

Application conditions

Do not apply if rain, contact with water, condensation, dampness or dew is expected within 24 h after application.

The optimum application temperature is from 10°C to 30°C. Do not apply with substrate and/or ambient temperature below 5°C, or if is expected within 24 h after application. Do not apply on frozen or frost-covered surfaces.

The relative humidity for the air should be less than 90%. Surface and air temperature must be at least 3°C higher than dew point during the application and curing process.

Curing

Allow a curing time of at least 72 hours (20°C and 50% R.H.) before putting into service **MAXFLEX**® 900 under water immersion. Applications carried out at lower temperatures with high humidity or poor ventilation will require longer drying and curing times.

Cleaning

Tools and equipments can be cleaned with **MAXSOLVENT**® immediately after use. Once the product hardens, it can only be removed by mechanical methods. Do not use blowtorches for cleaning since harmful gases are produced.

CONSUMPTION

The estimated consumption for **MAXFLEX**® 900 depends of joints and can be calculated from:

$$\text{Consumption (ml of sealant/lineal metre of joint)} = \frac{\text{Width of the joint (mm)} * \text{Depth of the sealant (mm)}}{1}$$

For a 10 x 10 mm joint, the estimated consumption is about 100 ml per 1 m length of joint. These figures may vary depending on the roughness, the surface conditions and the application procedure used. A preliminary test on-site will determine the coverage exactly.

Coverage for a 2,5 liters metal can of **MAXFLEX**® 900 can be estimated form:

$$\text{Coverage (lineal meters of joint/2,5 l metal can)} = \frac{2500 * 1}{\text{Width of the joint (mm)} * \text{Depth of the sealant (mm)}}$$

IMPORTANT INDICATIONS

- Use **PRIMER**® 900 as primer on porous substrates.
- Do not apply **MAXFLEX**® 900 on dry primer coat. Apply a new primer coat if necessary.
- Observe the ratio width / depth recommended.
- Avoid contact with water or solvents within 24 hours after application.
- For joints wider than 4 cm or expected movement higher than 25%, use the elastic strip **MAXFLEX**® XJS.
- Before covering with coatings or mortars, wait for the total curing time of the sealant.

- For further information and other uses not specified in this Technical Bulletin, consult our Technical Department.

PACKAGING

MAXFLEX® 900 (gun-grade consistency) and **MAXFLEX® 900 -F** (pour-grade consistency) is supplied in metal can of 2,5 liters with both components A and B inside. It is available in grey colour.

STORAGE

Nine months in its original unopened packaging, in a dry and covered place protected from frost and direct sunlight, with temperatures between 5°C and 30°C.

SAFETY AND HEALTH

MAXFLEX® 900 contains heavy-weight metal components, so avoid ingestion or direct contact with skin and eyes. Do not work without the protection of rubber gloves. In case of skin contact, wash with abundant water and soap. In case of eye contact, rinse immediately with clean water without rubbing. If irritation persists, seek medical assistance.

For further information, Safety Data Sheet for **MAXFLEX® 900** is available by request.

The final user must do disposal of the product and its empty packaging and following the local official regulations.

TECHNICAL DATA

Characteristics of the product	
CE Marking, EN 14188-2	
Description: Joint fillers and sealants. Cold applied sealants.	
Intended uses: Two-component polysulphide-based elastomeric joint sealant with high chemical resistance for permanent immersion applications.	
Appearance component A	White homogeneous creamy putty
Appearance component B	Brownish homogeneous creamy putty
Appearance A + B	Grey and homogeneous paste
Slump resistance, MAXFLEX® 900 gun-grade, NF P 85501, (mm)	None
Solids content A + B, 2 hours at 110°C, (%)	100
Characteristics of the mixed product and application conditions	
Optimum application temperature, (°C)	10-30
Total curing time at 23°C and 50 % R.H., (h)	72
Characteristics of the polymerized product after 4 weeks*	
Appearance	Close to rubber
Shore hardness A DIN 53505	23
Elastic recovery, NF P 88506, (%)	85
Elasticity modulus, 100%, DIN 53504, (MPa)	0,18
Tensile strength, DIN 53504, (MPa)	0,50
Elongation at break, DIN 53504, (%)	450-550
Elastic recovery, NF P 85506 – ISO 11600, (%)	85
In-service joint movement, (%)	25
In-service temperature resistance range, (°C)	From -30 to +80
UV and weathering resistance	Very Good
Chemical resistance	
Water, soapy water, brine	Excellent
Diluted inorganic acids and alkalis	Very good
Mineal oils and grease	Very good
Oil, fuel and hydrocarbons	Very good
Other organic chemicals	Consult
Consumption	
Coverage of 2,5 lt set in a 10 x 10 mm joint (linear meters)	Aprox. 25
Consumption** per 10x10 mm joint (ml of sealant/lineal meter of joint)	100

(*) Meet the following standards: DIN 18540-1973; ASTM 920-79; US TT-S 227 a+b+c; BS 4254

(**) These figures may vary depending on the roughness, surface conditions and application method. A preliminary test on-site will determine the coverage exactly.

GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO® S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



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