

"FLEX 9000" DOORS, WINDOWS & SIDINGS

106 XX0

GENERAL DESCRIPTION

Durable thermoplastic architectural one component sealing compound for multiple exterior uses. Dries by solvent evaporation.

INTENDED USES

Used to seal joints between two perpendicular surfaces subject to thermal movement. For sealing outdoor joints around door and window frames and sidings.

Good adhesion to concrete, masonry, painted or stained wood, natural, painted or anodised aluminum, steel, galvanized steel, metal, fibreglass and vinyl (PVC).

The performances of «FLEX 9000» as well as its easy use make it an ideal choice for numerous exterior utilisations, for both professional users and handymen.

REMARKS:

- Do not use in contact with surfaces such as asphalt or tar products and insulation panels (polystyrene, etc.) which can be damaged by solvents;
- Does not withstand immersion (tank) or abrasion (foot traffic).

CHARACTERISTICS

- It is resistant to normal weathering conditions such as rain, sunlight, snow, ultraviolet radiation, ozone, atmospheric contamination and pollution.

ADVANTAGES

- ⇒ Professional quality with excellent life expectancy.
- ⇒ Multipurpose with a good adhesion on many construction materials.
- ⇒ Ease of application, does not generally require priming.
- ⇒ Rapid skin formation on which dust will not adhere.
- ⇒ Can be applied on vertical, horizontal or overhanging surfaces without subsiding or sagging.
- ⇒ No staining of surrounding surfaces.
- ⇒ Remains flexible with an excellent and permanent elasticity up to -30°C (-22°F).
- ⇒ Can be stretched out to 900% (ASTM D-412) without breaking.
- ⇒ Does not require painting; however it can be painted over 24 hours after application (latex paint).
- ⇒ Withstands weathering, ultraviolet rays and exterior temperature changes.

(1) REMARK:

Due to the MULCO's expertise with the thermoplastic sealants, "FLEX 9000" is manufactured, put in cartridges, stored and delivered to our customers in such a way that the paste is free of air bubbles and is extruded uniformly and constantly. However, it happens sometimes that absorbent or porous surfaces cause the appearance of bubbles in the joint of the sealant during its drying.

STORAGE AND APPLICATION TEMPERATURE

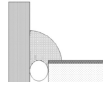
"FLEX 9000" does not deteriorate below freezing point. Nevertheless, since its viscosity increases during the lowering of its temperature, it is recommended to store it in a dry place where the temperature is between 10°C (50°F) and 30°C (86°F). Under these conditions, the sealed cartridges could be preserved for 3 years.

"FLEX 9000" can be applied in winter as well as in summer. However, the product's temperature must be above 5°C (40°F) to be applied easily.

SURFACE PREPARATION

There must be a free space between the two materials to permit their dimensional variations. Once applied, the sealant caulks the aperture. It will get compressed or stretched out depending on the movement of the materials. To determine the size of the joint, one must take into consideration the expansion or the contraction the materials will be subjected to with humidity and temperature variations. It must also be noted that some materials have greater dimensional variations than others. If possible, apply "FLEX 9000" whenever the size of the aperture between the materials is in-between.

When the joint covers an aperture of 6 mm (1/4 in.) or larger, the joint must be sustained by a backing rod in polyethylene. The diameter of the backing rod must be approximately 3 mm (1/8 in.) wider than the width of the joint to permit compression.



New metal and solvent resistant oily surfaces must be washed with acetone and dried up. Scrape rusty metal with a metallic brush prior to cleaning.

Surfaces sensitive to solvents such as vinyl or dirty plastic materials must be washed out with a soapy solution, then rinsed and dried up.

Concrete and masonry must be scraped with a metallic brush so as to get a sound, firm, clean, stainless surface.

If the application of "FLEX 9000" is to be made at a temperature lower than 5°C (40°F), the surface must be at a temperature at least 3°C (5°F) higher than dew point. The surfaces must be free of frost or ice.

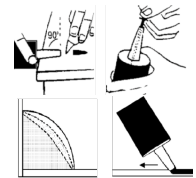
If an old sealant or putty is present, it must be taken off. The surface must be in a seemingly new, firm and clean state. It must also be free of creosote, oil, grease, wax, silicone or silicone based product, asphalt or bitumen based product (coating, adhesive, etc.), rust, any loose or foreign material or any material soluble in solvents.

RECOMMENDED PRIMER

"FLEX 9000" does not generally require priming on most building materials such as: steel, galvanized steel, natural, painted or anodised aluminum, concrete (28 days old), glass, fibreglass, masonry, painted or stained surfaces including wood, vinyl sidings and windows and many common building materials.

DIRECTIONS FOR USE

Cut the nozzle of the cartridge at right angle (90°), a little narrower than the width of the desired joint. Pierce the aluminum patch sealing the cartridge inside the nozzle. Use a caulking gun and apply with a uniform and adequate pressure so as to give the joint a convex form.



"FLEX 9000" must not be smoothed or formed to avoid tensions in the product during drying time. During the extrusion of "FLEX 9000", the angle between the gun and the joint to be made must be approximately 45°. Pull the tip of the gun away from the joint, as illustrated.

Make sure the sealant comes into contact with each surface on a width of at least 3 mm (1/8 in.).

Example of minimal required widths for "FLEX 9000" joints with various exterior materials per 10 feet lengths:

Steel, aluminum, concrete and painted or stained wood:	6 mm (1/4 in)
Brick, masonry and glass:	6 mm (1/4 in)
Vinyl (PVC):	12 mm (1/2 in)

COVERAGE

Linear metres per 300 mL cartridge:						
Depth (mm)	6	8	10	12	14	16
Width (mm) 6	11	8	6.4	5.3	4.5	4
8	8	6	4.8	4	3.4	3
10	6.4	4.8	3.8	3.2	2.7	2.4
12	5.3	4	3.2	2.7	2.3	2

Linear feet per 300 mL cartridge:				
Depth (in.)	1/4	3/8	1/2	5/8
Width (in.) 1/4	31	20.7	15.5	12.4
3/8	20.7	13.8	10.3	8.3
1/2	15.5	10.3	7.7	6.2
5/8	12.4	8.3	6.2	5

PRODUCT DATA

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PRODUCT TYPE:	Thermoplastic architectural one component sealing compound. Dries by solvent evaporation.	
GENERAL APPEARANCE:	Thixotropic and homogeneous paste, free of lumps and easy to extrude.	
COLOURS:	Consult our colour guide.	
COMPOSITION:	Thermoplastic rubber, synthetic resins (binder), titanium dioxide (clear excepted), colour pigments (clear excepted), no inert charge (pigment), promoter of adhesion (agents), solvents (volatile material) and other additives.	
VISCOSITY:	1 000 000 cP	
FREEZE-THAW STABILITY:	"FLEX 9000" will not be damaged by the frost.	
CLEANING AGENT	<p>(before drying) : Use mineral spirits.</p> <p>dry product) : Use a putty knife and mineral spirits or other effective solvent (too strong solvent may damage other surfaces)</p> <p>(skin contact) : As soon as possible, wash with mineral oil, then wash carefully with soapy water, and rinse.</p> <p>(dry product surface) : If surface seems to have yellowed, greyed or faded, a contaminant may have deposited on the product surface. Use a cleaner for vinyl surfaces containing Sodium Tripolyphosphate (STPP) or another strong water-based cleaner.</p>	
FLAMMABILITY:	At application: Dry:	flammable; combustible.
APPLICATION METHOD:	Manual or pneumatic caulking gun.	
APPLICATION SURFACE:	Outdoor vertical or horizontal joints.	
EASE OF APPLICATION:	ASTM C1183 :	18 mL/min (easy).
PERMISSIBLE TEMPERATURES DURING THE APPLICATION:	Product: Surface:	5 to 30°C (40 to 86°F) -25 to 40°C (-13 to 100°F)
MINIMUM SIZE:	Width and depth:	6 mm (1/4 in).
MAXIMUM SIZE:	Width: Depth:	16 mm (5/8 in); 10 mm (3/8 in).
SLUMP OF SEALANT:	ASTM D2202 :	0 mm.
SERVICE TEMPERATURE:		Minimum: -30°C (-22°F); Maximum: 50°C (122°F).
HARDNESS (SHORE A):	ASTM C661 :	40.
ELONGATION BEFORE RUPTURING:	ASTM D412 :	900%.
LOW TEMPERATURE FLEXIBILITY:	CAN/CGSB -19.0-M77 method 11.1	pass -30°C (-22°F).
TENSION STRENGTH:	ASTM D412 :	3 MPA (435 psi).
ADHESION PEEL STRENGTH:	ASTM C794 :	Aluminum: 6,4 KN/m; Concrete: 6,3 KN/m.
UV RESISTANCE:	ASTM C793 :	Excellent.
DENSITY :	1,0 kg/L	
FLASH POINT:	28°C (82°F)	
DISPOSAL:	Consult your municipality in order to dispose of paint residues according to environmental regulations. Do not pour down a drain or storm sewer.	
STANDARDS:	<p>Meets the requirements of ASTM C920, Type S, Grade NS, Class 25, Use NT</p> <p>Surpasses the elasticity and adhesion traction criteria after cyclical treatment of the latest edition of the repealed CGSB standards:</p> <p>19-GP-5M (acrylic and solvent); 19-GP-14M (butyl); CAN/CGSB -19.13-M87 (category 25) (silicone, polyurethane, polysulfide, 1 part); CAN/CGSB -19.17-M90 (acrylic latex); CAN/CGSB -19.24-M90 (silicone, polyurethane, polysulfide 2 parts).</p>	

LIMITATIONS OF USE

When possible, the use of opaque colour is preferable to the use of clear or translucent product.

Before using the clear or the translucent product, test the resistance of the siding colour, the colour of some materials wash out by solvents and will yellow or colour the sealant.

Does not adhere to polyethylene, polypropylene, recycled plastic, Teflon or other comparable materials.

Make sure the joint variation does not exceed the "FLEX 9000" elasticity.

When "FLEX 9000" is painted, the paint may crack if "FLEX 9000" supports a movement higher than the paint elasticity.

The drying time of "FLEX 9000" depends on temperature, relative humidity and ventilation.

The shelf life is diminished by warehousing over 25°C (77°F).

Not for joints submerged in water for prolonged periods of time.

Adhesion on material not specifically mentioned cannot be guaranteed. It is up to the customer to make his own performance tests or to consult our technical department.

PRECAUTIONS AND SAFETY MEASURES

MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE AND SKIN IRRITATION. Avoid breathing vapours, spray or mists. Avoid contact with skin and eyes. Wear protective gloves/clothing and eye/face protection. Keep out of reach of children. **These warnings encompass the product series. Prior to use, read and follow product-specific SDS and label information. FIRST AID TREATMENT:** If swallowed, call a Poison Control Centre or doctor immediately. If in eyes or on skin, rinse well with water. If breathed in, move person to fresh air. Contains: Contains: Nepheline syenite; titanium dioxide; Limestone; Kaolin; Diatomaceous earth; Nonylphenol, branched, ethoxylated (EO>14 mol). Contains isothiazolinones. May cause allergic reaction. Keep container tightly closed and sealed until ready for use. For workplace use, an SDS is available from your retailer or by calling 1-800-463-7426. EMERGENCY SPILL INFORMATION: (412) 434-4515 (U.S.), (514) 645-1320 (Canada).

LIMITED WARRANTY

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