

# TECHNICAL DATA

PRODUCT CODE

## "SUPRA EXPERT" 104 XX0 EXTERIOR MULTIPURPOSE THERMOPLASTIC SEALANT FOR PROFESSIONAL USERS

### **GENERAL DESCRIPTION**

Super-durable thermoplastic architectural one component sealing compound. Dries by solvent evaporation.

## **INTENDED USES**

"SUPRA EXPERT" is formulated to seal outdoor joints between two perpendicular surfaces exposed to thermal movement around door and window frames, sidings and glass in window frames. Super adhesion on concrete, masonry, painted or stained wood, natural, painted or anodised aluminum, steel, galvanized steel, metal, glass, fibreglass and vinyl (PVC).

#### **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;
- · For exterior use only
- Do not use on polyethylene, polypropylene, recycled plastic, Teflon or other comparable materials;
- Do not use on floor joints where abrasion will occur;
- Does not withstand immersion (tank).

## **CHARACTERISTICS**

- It is resistant to normal weathering conditions such as rain, sunlight, snow, ultraviolet radiation, ozone, atmospheric contamination and pollution.
- The performances of "Supra Expert", its ease of use as well as its remarkable choice of colours make it the ideal choice for professionals in the fields of construction or renovation and in manufacturing environment.

## **ADVANTAGES**

- ⇒ Professional quality with excellent life expectancy.
- $\Rightarrow$  Free of air bubbles (1).
- ⇒ Multipurpose with a super adhesion on many construction materials, including glass.
- ⇒ 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.
- ⇒ Does not contain silicone.

- ⇒ No staining of surrounding surfaces.
- $\Rightarrow$  Remains flexible with a superior and permanent elasticity up to -40°C (-40°F).
- ⇒ Can be stretched out to 1400% (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.
- ⇒ Resistant to rain upon its application.

## (1) REMARK:

Due to the MULCO's expertise with the thermoplastic sealants, "SUPRA EXPERT" 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**

"SUPRA EXPERT" 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.

"Supra Expert" 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.

Before use, be sure to read and follow the instructions and warnings on the label and Material Safety Data Sheet. See other cautions on the last page

## 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 "Supra Expert" 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 "SUPRA EXPERT" 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

"Supra Expert" 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.



"Supra Expert" must not be smoothed or formed to avoid tensions in the product during drying time. During the extrusion of "Supra Expert", 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 "SUPRA EXPERT" 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.) <b>1/4</b>	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	
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.

VISCOSITY:	1 000 000 cP (manufacturing specification, working viscosity may vary).
FREEZE-THAW STABILITY:	"Supra Expert" will not be damaged by the frost.
dry product) :  (skin contact) :	Use mineral spirits. Use a putty knife and mineral spirits or other effective solvent (too strong solvent may damage other surfaces) As soon as possible, wash with mineral oil, then wash carefully with soapy water, and rinse. 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.
FLAMMABILITY:	At application: 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:         5 to 30°C (40 to 86°F)           Surface:         -30 to 40°C (-22 to 100°F)
MINIMUM SIZE:	Width and depth: 6 mm (1/4 in).
MAXIMUM SIZE:	Width:       16 mm (5/8 in);         Depth:       10 mm (3/8 in);
SLUMP OF SEALANT:	ASTM D2202 : 0 mm.
STANDARDS:	Though no standard presently exists for thermoplastic rubber-based sealants, "Supra Expert" surpasses the elasticity and adhesion traction criteria after cyclical treatment of the latest edition of the repealed CGSB standards:  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).
SERVICE TEMPERATURE:	Minimum: -40°C (-40°F); Maximum: 50°C (122°F).
HARDNESS (SHORE A):	ASTM C661 : 40.
ELONGATION BEFORE RUPTURING:	ASTM D412 : 1 400%.
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: 8,1 KN/m;  Glass: 7,4 KN/m;  Concrete: 7,9 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.

\*Product data calculated on product 104-110.

#### 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 "SUPRA EXPERT" elasticity.

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

The drying time of "SUPRA EXPERT" 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

Before use, be sure to read and follow the instructions and warnings on the label and Safety Data Sheet (SDS). Avoid contact with eyes or skin. Keep out of the reach of children. Use only in well-ventilated area. Keep containers tightly closed and sealed until ready for use. Use personal protective equipment as required.

Danger: Flammable vapour. Harmful in contact with skin or if inhaled. Causes serious eye irritation and skin irritation. May cause an allergic skin reaction. Suspected of damaging the unborn child. Suspected of causing cancer. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure (central nervous system (CNS), hearing organs, kidneys, liver). Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, eye or face protection and protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Do not breathe vapour. Wash hands thoroughly after handling. Get medical attention if you feel unwell. IF overexposure or concerned: Get medical attention. Call a poison centre or physician if you feel unwell.

**First aid treatment:** If inhaled: remove person to fresh air and keep comfortable for breathing. If on skin (or hair): take off immediately all contaminated clothing. If on skin: wash with plenty of soap and water. Rinse skin with water. If skin irritation or rash occurs: get medical attention. If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical attention.

For workplace use, an SDS are available from your retailer, through our website or by calling 1 800 463-7426. Emergency spill information: 1 514 645-1320 or 1 800 463-7426.

## **LIMITED WARRANTY**

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