



TECHNICAL DATA

PRODUCT CODE

«UNIVERSAL SILICONE»

111 XX0

Technical data # 20081104

DESCRIPTION

Exterior or interior multipurpose, one-part moisture curing silicone sealant.

INTENDED USES

Used to seal joints between two perpendicular or juxtaposed surfaces subject to thermal movement, around door and window frames, sidings, and glass on window frames.

The performance of «**Universal Silicone**» as well as its easy use, make it an ideal choice for numerous utilizations. Can be used to glue some car fixtures or home metal appliances.

- REMARKS:**
- cannot be painted;
 - does not withstand abrasion (foot traffic);
 - do not use on bare wood or concrete, stainless steel, bare aluminum, copper, brass, plexiglass, galvanized metal or other alloys containing zinc or magnesium.

ADVANTAGES

- ⇒ Available in a choice of colors.
- ⇒ Without danger after complete curing, accepted by Canadian Food Inspection Agency for occasional food contact.
- ⇒ Can be applied on vertical or horizontal, overhanging surfaces without subsiding or sagging.
- ⇒ Sticks on glass, fiberglass, silicone surfaces or ceramic.
- ⇒ Excellent resistance to weathering, chemical pollutants, vibrations, humidity, ozone and temperature changes.
- ⇒ Room temperature vulcanization (RTV).
- ⇒ Can be applied within a temperature range of -20°C (-4°F) to 50°C (122°F).
- ⇒ Allows joint movement up to $\pm 25\%$ of the original joint width.
- ⇒ Remains flexible with a superior and permanent elasticity.
- ⇒ Clear «**Universal Silicone**» can be used to seal domestic aquariums.
- ⇒ Withstand temperatures between -60°C (-75°F) and 230°C (450°F) without any loss product properties.

STORAGE AND APPLICATION TEMPERATURE

«**Universal Silicone**» does not deteriorate below freezing point. Anyhow, it is recommended to store it in a dry place the temperature of which is between 5°C (40°F) and 30°C (85°F). Thus, the sealed cartridges of «**Universal Silicone**» could be preserved for 2 years.

«**Universal Silicone**» can be applied either in winter or in summer at a temperature between -20°C (-5°F) and 50°C (120°F).

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.

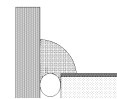
To determine the size of the joint, one must take into consideration the expansion or the contraction the materials will be subjected to with the temperature variations. It must also be noted that some materials have greater dimensional variations than others.

If possible, apply «**Universal Silicone**» 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.

If an old sealant or putty is present, they must be taken off. The surface must be in a seemingly new, dry, firm and clean state. It must be also free of creosote, oil, grease, wax, rust, any loose or foreign material. New metal and solvent resistant oily surfaces must be washed with acetone and dried up. Scrape rusty metal with a metallic brush.

If the application of «**Universal Silicone**» 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.



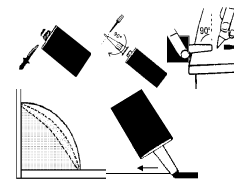
REQUIRED PRIMER

No primer required on specified surfaces.

APPLICATION

Cut the screwed end of the cartridge, but keep the threads to screw the nozzle. Cut the nozzle of the cartridge at right angle (90°), a little narrower than the width of the desired joint. Use a caulking gun and apply with a uniform and adequate pressure so as to give the joint a flat or a convex form.

During the extrusion of «Universal Silicone», 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 of the surfaces on a width at least 3 mm (1/8 in.). If tooling is necessary, it must be done immediately as surface will skin in 10 minutes.

COVERAGE

Linear meters per cartridge:							Linear feet per cartridge:				
Depth (mm)	6	8	10	12	14	16	Depth (in.)	1/4	3/8	1/2	5/8
Width (mm) 6	11	8	6,4	5,3	4,5	4	Width (in.) 1/4	31	20,7	15,5	12,4
8	8	6	4,8	4	3,4	3	3/8	20,7	13,8	10,3	8,3
10	6,4	4,8	3,8	3,2	2,7	2,4	1/2	15,5	10,3	7,7	6,2
12	5,3	4	3,2	2,7	2,3	2	5/8	12,4	8,3	6,2	5

TECHNICAL GUIDE

GENERAL APPEARANCE:	Homogeneous paste without lumps, easy to be extruded.
COLOUR:	Consult the color guide.
COMPOSITION:	100 % Silicone polymers.
CLEANER (wet product):	Use mineral spirits before «Universal Silicone» dries and hardens.
CLEANER (dry product):	Use a putty knife and a silicone stripper.
CLEANER (skin contact):	Whenever possible, wash with mineral oil, then wash carefully with soapy water and rinse.
FLAMMABILITY:	At application: non-flammable; Dry: non-flammable.
FREEZE-THAW STABILITY:	«Universal Silicone» is not deteriorated by freeze.
APPLICATION METHOD:	Caulking gun.
APPLICATION SURFACE:	Indoor and outdoor, vertical or horizontal joints.
MINIMUM SIZE:	Width and depth: 6 mm (1/4 in.).
MAXIMUM SIZE:	Width: 25 mm (1 in.); Depth: 10 mm (3/8 in.).
BLEEDING:	Do staining.
VERTICAL JOINTS SAGGING:	CAN/CGSB-19.0-M77 method 7.1: inferior to 3 mm.
STANDARDS:	Associated with the CAN/CGSB 2-19-13-M87 (class 25)
TACK FREE TIME:	10 minutes.
INITIAL SETTING TIME:	For 3 mm thickness: 24 hours at 25°C (77°F) and 50% relative humidity.
COMPLETE SETTING TIME:	3 mm thickness per 24 hours at 25°C (77°F) and 50% relative humidity.
SERVICE TEMPERATURE:	Minimum: -60°C (-75°F); Maximum: 232°C (450°F).
HARDNESS (shore A):	CAN/CGSB-19.0-M77 method 8.2: 25.
TENSION STRENGTH:	CAN/CGSB-19.0-M77 method 14.6: 2,4 M Pa. (350 psi.).
VOC content: (Volatile organic compounds)	4 %

RESTRICTIONS

The drying time of «**Universal Silicone**» depends on temperature, relative humidity and ventilation.

The chemical reaction that takes place when the «**Universal Silicone**» is exposed to humidity emits acetic acid vapors (vinegar odor) causing it to polymerize (dry).

Do not use on frozen or damp surfaces.

Do not apply on substrates that are porous or contain lime.

Adhesion to metals which are subjected to continuous submersion is not recommended.

On plastics, an adhesion test should be conducted by the user to confirm that the adhesion of the product is sufficient.

Make sure the joint variation does not exceed the «**Universal Silicone**» elasticity.

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

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.

SAFETY PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN.

Before using «UNIVERSAL SILICONE» consult the product material safety data sheet.

Wear protective eye gear. Do not wear contact lenses during application. Do not manipulate contact lenses if silicone is still present on fingers, skin or nails. The remaining silicone on hands, may transfer onto the contact lenses and cause severe eye irritation.

Disposal: consult your municipality to dispose in conformity with regulations.