

# Marine

## FISH TANK SILICONE SEALANT

## **TECHNICAL DATA SHEET**

## **SMART ADVANTAGES**

- FISH TANK ASSEMBLY
- 100% WATERPROOF
- PERMANENTLY FLEXIBLE
- LOW SHRINKAGE

#### **DESCRIPTION**

Bostik Marine is a clear, one-part acetoxy-curing high quality silicone sealant that provides a permanent flexible, durable, watertight seal for building of fish tanks and aquariums. The sealant is extremely resistant to UV, weathering, ageing and water, and offers excellent chemical resistance and is unaffected by alcohols, dilute acids and alkalis, soap and household detergents. The sealant remains flexible over a wide range of temperatures from -40°C to 100°C. It also performs as an excellent adhesive on nonporous surfaces where an elastic gap-filling bond is required. It has a nonsag rheology and can be applied to vertical surfaces. Bostik Marine does not contain a fungicide which may be harmful to aquarium fish.





### **APPLICATIONS**

- Excellent for building of fish tanks and aquarium, or almost any other heavy duty marine work.
- Ideal for general purpose sealing, waterproofing and weatherproofing requirements in and around the house.

## **ADHESION**

Bostik Marine exhibits excellent primerless adhesion to many non-porous materials e.g. ceramics, glass, enamel, porcelain, coated wood, painted surfaces, canvas, stainless steel, aluminium, some rubbers and some plastics (epoxide, polyester, polyacrylate, polystyrene, formica, fiberglass, acrylics, polycarbonates and rigid PVC).

## **LIMITATIONS**

- Not suitable for alkaline surfaces such as concrete, fibrous cement, asbestos, plaster and marble.
- Not suitable for some metals i.e. mild steel, lead, copper, tin, galvanized iron, brass or zinc as it may cause
- CANNOT be over-painted.
- Not suitable where mould-resistance is required e.q. sealing of showers, basins and baths.
- May become discoloured in contact with some organic elastomers, which tend to bleed oil or solvents into the silicone, e.g. EPDM, APTK, Neoprene and Bituminous surfaces.
- It should not be used on the back of mirrors, as it will de-silver the mirror backing, affecting the front appearance of the mirror.
- Not suitable for contact with natural stone i.e. marble, granite, quartzite as it may discolour the surfaces.
- Will not adhere to some plastics such as polyethylene, polypropylene and Teflon.
- Do not apply sealant when relative humidity is below 10% cure rate will be affected.

## **SAFETY INSTRUCTIONS**

Bostik Marine is non-toxic, however it is advisable to wear gloves in order to avoid direct skin contact. In the event of skin or eye contact, rinse thoroughly and immediately with water. Seek medical assistance if irritation or discomfort persists. The product releases a pungent vinegar-like odour when uncured. Avoid breathing in vapours. Always work in a well ventilated area. Keep out of reach of children! Cured silicone rubber can be handled without any health risk. Refer to our Safety Data Sheets for further toxicological information and comprehensive handling instructions.

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#### **SURFACE PREPARATION**

Ensure surfaces are clean, dry and free of loose materials, dust, grease, rust and other contaminants. Surfaces such as metals and glass should be degreased with a solvent e.g. acetone. Plastics should be lightly abraded with emery paper. Alcohol based cleaners should not be used for cleaning surfaces as alcohol inhibits the cure of silicones. Soaps or detergents used to clean the surface must be rinsed away thoroughly with clean water to ensure that all traces of the soaps are removed before sealing. Use backing material when sealing deep cavities. If the area being sealed needs to be painted, ensure that the paint has dried before applying sealant. You cannot paint over silicone sealant! Poor surface preparation may result in the delamination of the silicone.

#### **HOW TO USE**

- 1. Ensure that surfaces are prepared as above.
- 2. Use masking tape to get a clean, even sealant line and to eliminate cleaning difficulties on porous surfaces. Remove tape after silicone application before the sealant skins.
- 3. Cut the tip off the cartridge and screw on the nozzle. Cut the tip of the nozzle at an angle to achieve the desired bead size. Apply with a caulking gun in a continuous bead to the prepared joint.
- 4. Remove unwanted silicone immediately.
- 5. Smooth down after application within 3-5 min before skin formation occurs, by using a flat or rounded tool.
- 6. Sealant dries to touch in approximately 25 minutes and reaches full cure after approximately 24 hours.

#### **CLEANING**

- Uncured silicone can be removed from the hands or tools using a clean solvent soaked cloth, e.g. turpentine or paraffin. If removing uncured silicone from clothing, check fabric colour fastness before applying solvents.
- Cured sealant must be removed mechanically with a sharp knife or chemically with Bostik Silicone Stripper.

### STORAGE STABILITY

Bostik Marine has a shelf life of at least 12 months if stored in a cool (below 25°C), dry place in its original moisture-tight container. If the material is kept beyond the recommended shelf life, it is not necessarily unusable, but a check should be performed to observe whether the product is still workable, apply-able and uncured. To maximize the shelf life of the opened cartridge, we recommend that the nozzle be removed and a piece of plastic placed over the cartridge tip after which the nozzle must be screwed back on. A large screw inserted into the nozzle tip also helps to extend the life. Store in a cool environment.

#### **PRODUCT PACKAGING**

• 280ml Cartridge

PRODUCT CHARACTERISTICS	
Type	Acetoxy curing
Appearance	Clear, homogenous non sag paste
Density (g/cm³) [ASTM 1045-86]	0.98g/cm³ at 23°C

TYPICAL PERFORMANCE DATA	
Application temperature	5°C to 40°C
Curing time	Approximately 24 hours per 2mm (25°C, 50% RH)
Skin over time	Approximately 25 minutes (25°C, 50% RH)
Coverage (280ml cartridge)	11 meters (5mm x 5mm joint)
Chemical resistance	Resistant to most diluted mineral and organic acids, alkalis
	and salts at normal temperatures
Temperature resistance	Retains elasticity down to - 40°C and up to 100°C
Water resistance	Waterproof
Modulus at 100% elongation [ASTM D412]	0.36 N/mm²
Movement accommodation factor [ISO 11600]	18%
Shore A hardness [ASTM D412]	18
Elongation at break [ASTM D412]	>400%
Tensile strength [ASTM D412]	>1.3 N/mm²

## DISCLAIMER

The above information is only offered as a guide to the use of this product. Furthermore, users should satisfy themselves that it is suitable for their needs. Since we have no control over the conditions under which it is used, we cannot accept responsibility for the problems caused by the use and/or application of this product.

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