

## Technical Data Sheet

# antas<sup>®</sup> MS30

## MS Joint Sealant

### DESCRIPTION

antas<sup>®</sup> MS30 Joint Sealant is a one component, low modulus, neutral curing and modified silane (MS) joint sealant. It is designed and tested for weatherproof sealing of walls and panel joints in construction with good compatibility with a wide range of substrate including concrete, brick, stone, CFC, timber, aluminium, steel, cast iron and selection of waterproofing membranes.



antas<sup>®</sup> MS30 typically used as expansion joint or weatherproof sealant for building façade including sealing of concrete precast, ALC, CFC, ACM panels, brick walls, or perimeter of windows or doors. It's also used as fillet sealant as part of waterproofing systems.

antas<sup>®</sup> MS30 has also been successfully applied in infrastructure projects eg roads and bridges.

### FEATURES

antas<sup>®</sup> MS30 is a MS or hybrid sealant based on STP-e polymer. It is formulated to high performance with many of the beneficial characteristics of both polyurethanes and silicones.

- Excellent mechanical property.
- Excellent adhesion to most building materials.

- High movement capacity.
- Excellent weather durability and resistance to UV, heat, cold or humidity
- Good surface painting feasibility.
- Safe and environmentally friendly with low VOC and no isocyanate content.
- Cured sealant can be immersed in water continuously.
- Service temperature of -40 ~ 90°C.

### SPECIFICATION

No.	Test items	Test result	
1	Movement Capability	±25%	
2	Tack free time, h	1.2	
3	Resistance to flow, mm	<3	
4	Elastic recovery, %	85	
5	Slump, mm (N type)	Vertical	0
		Horizontal	0
6	Tensile Modulus, MPa	23°C	0.3
		-20°C	0.3
7	Tensile properties at maintained extension	No failure	
8	Adhesion/cohesion properties at variable temperatures	No failure	
9	Adhesion/cohesion properties at maintained extension after water immersion	No failure	
10	Rate of mass loss, %	1	

## STANDARD AND COMPLIANCE

- ISO 11600:2002 Building construction - Jointing products: Class F-25LM
- ASTM C920: Standard Specification of Elastomeric Joint Sealants – Type S, NS, Class 50, Use M, G, A

## APPLICATION

Prepare the substrate and keep it clean, dry and free from grease. Remove all dirt, oil, grease, detergents and loose material. The joint edges can be masked with tape to prevent contamination. Remove the tape carefully after tooling. Use suitable backing rod to fill the cavity of the joints as needed.

Cut nozzle to desired size at 45° angle and attach to the sealant cartridge. Insert the cartridge into a caulking gun. Pull the trigger of the caulking gun to extrude sealant through the nozzle.

For joint sealing, smooth the surface of the sealant filled joint within the tooling time and clean off excess sealant.

For bonding and installation of flooring or prefabricated objects, sliding the floor or other objects onto the adhesive sealant, tap into place.

## CURING TIME

antas® MS30 is cured by reacting with moisture in the air. Depending on ambient conditions, it has a tack-free time of approximate 70 minutes and curing rate of approximately 3mm in the first 24 hours.

It is recommended to secure the substrate prior to the applying of the sealant and avoid any movement during the curing process.

## PRIMING

Priming is not usually required when using antas® MS30 providing joint faces are clean and free from any trace of laitance or surface contamination. However, adhesion to substrate and compatibility with surface coatings should always be tested in advance to determine the

need of a primer.

If required, a thin film of antas® 202 primer can be applied on substrate by using a clean lint-free cloth and allowed to dry before sealant application.

In required, antas® 203J adhesion promoter can be applied on the surface of antas® MS30 in promoting adhesion to surface coatings.

## MAINTENANCE & REPAIR

antas® MS30 sealant can be easily repaired when needed. Firstly, remove the damaged section and clean the surface with solvent, then patch the section with new sealants of same colour and grade.

## LIMITATIONS

antas® MS30 should not be applied under the following conditions:

- On substrate that bleed oil, plasticiser or solvent etc.
- On materials such as impregnated wood; oil-based caulks; green or partially vulcanized rubber gaskets/tapes; bituminous below-grade waterproofing or asphalt-impregnated fibreboard etc.
- In confined spaces.
- Substrate temperature over 45°C or below 5°C.
- Wet surface.
- Surface contact with food directly.
- For structural glazing.
- Other unsuitable conditions determined by trial.

## PAINTABILITY

antas® MS30 is paintable with most water based paints. However, due to large number of paints and varnishes available, compatibility test is highly recommended prior to the application.

*Note: antas® MS30 has larger movement capability than normal paint films. Cracking of paint film may occur with movement.*

## CLEAN UP

Excess sealant can be removed with mineral spirit and cleaning solvent before cured. Once cured, antas<sup>®</sup> MS30 may only be removed mechanically.

## SAFETY

antas<sup>®</sup> MS30 has low VOC and no isocyanate content. Avoid direct contact with eyes when operating. In case of accident, rinse opened eye under running water for several minutes.

During the curing process, small amount of alcoholic molecules is released. Keep good ventilation at the construction site. Avoid applying in confined space.

Read and follow material safety data sheet for safe handling or using.

## PACKAGING

600ml sausages / 20 per carton

## COLOUR

Concrete Grey, Black, White, Off-white, Mid Grey, Dark Grey, Sandstone, Beige and Redwood, other colours available on request.

## TRANSPORTATION & STORAGE

antas<sup>®</sup> MS30 is classified as non-dangerous goods for transportation.

The product should be stored in a dry and cool place between 5 to 30°C. The shelf life is 12 months from the date of manufacturing under normal storage conditions.

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