ADOS Krystal Clear MS Adhesive Sealant

CRC Industries NZ, Auckland NZ

I. Product Description

ADOS Krystal Clear MS is a high performance adhesive sealant based on Hybrid Silyl Modified Polymers (commonly known as MS or SMP) formulated for durable bonding, sealing and waterproofing. It cures quickly in ambient temperatures and retains excellent bond strength, elasticity and tear resistance over the years.

ADOS Krystal Clear MS will not stain and is compatible with commonly used paint systems. It will not yellow or crack or show signs of aging when exposed to adverse weather conditions and harsh UV radiation. It does not contain solvents, isocyanates and silicones.

ADOS Krystal Clear MS has excellent primerless adhesion to PVC, concrete, brick, timber, glass, aluminium, iron, steel, stainless steel, copper, ceramic, plywood, fiberglass, various plastics and many of the newly developed materials in the demanding building and construction industries.

II. Application and Directions

Preparation for use on dilation joints:

- The surface of the dilation joint must be hard, clean, dust and grease free. Remove all separated and badly attached pieces.
- For a clean finish, mask edges of joints with masking tape.
- For the optimal elastic characteristics of the sealant, a correct width/depth ratio is important (2:1) with a maximum of 1:1. The sealant must not grip the bottom of the joint, but only its sides. This can be achieved by using underlying materials onto which the sealant has no adhesion (foamed polyethylene, polyurethane).
- The minimum joint width is 6 mm, the maximum 20 mm.

Application:

- Cut the cartridge at the top and screw on the nozzle which has to be cut according to the width of the joint.
- Apply sealant as evenly as possible.
- During work interruption release the handle on the gun and pull the piston back.
- When finished, level the sealant with an appropriate instrument or a well soaped finger.
- Remove masking tape before the sealant starts to harden.

Clean Up:

 Excess uncured product can be easily cleaned with mineral turpentine or most solvent degreasers.

The following table shows how many linear metres of joints can be sealed with one 290 ml cartridge relative to the depth and width of the joint:

Joint depth (mm)	Joint width (mm)					
	6	8	10	12	15	20
6	8.3	6.2	5.0	4.2		
8		4.7	3.7	3.1	2.5	
10			3.0	2.5	2.0	1.5
12				2.1	1.7	1.2
15					1.3	1.0
20						0.75



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III. Features & Benefits

- Works on wet & dry surfaces
- Will not crack or yellow No signs of aging in adverse weather conditions and UV exposure
- **Permanently flexible** Excellent mechanical properties over a wide temperature range for use in dilation joints
- Dries crystal clear
- Paintable Cured product can be painted with most solvent and water based paints and varnishes
- Low VOC content, odourless Environmentally and user friendly
- Interior and exterior use
- Non-slump Suitable for vertical joints
- Extreme low shrinkage Less than 1%, allows application in thick layers
- **Non-bubbling** The surface stays smooth and intact
- Non-staining
- Primerless one-component product Convenient and time saving on construction sites
- Cures fast For increased productivity
- Skins over in a short time To resist dirt and dust pickup
- **Easy handling** Can be extruded from cartridges with a low force even in low temperatures
- Totally chemically neutral
- Good chemical resistance To water, mild solvents, mineral oils, fat, low concentration anorganic acids and bases
- Easy clean up Just wipe up any excess uncured product with a wet cloth
- Use on most substrates PVC, concrete, brick, timber, glass, aluminium, iron, steel, stainless steel, copper, ceramic, plywood, many of the newly developed materials for construction, fiberglass, various plastics
- Contains no solvents or isocyanates

IV. Typical Properties and Characteristics

Physical Properties:

Туре	Adhesive sealant
Composition	MS polymer
Colour	Clear
Odour	None
VOC	Low
Viscosity	Paste
Curing mechanism	Moisture curing
Specific gravity	1460 ± 10 kg/m ³
Skin formation time (23 ℃ / 50% rel. humidity)	20-30 minutes
Cure time (23 ℃ / 50% rel. humidity)	2-3 mm/day
Application temperature	5℃ to 30℃



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Performance Characteristics:

Hardness Shore A (ISO 868)	15-20		
Change in volume (ISO 10563)	< 1%		
Tensile strength (ISO 8339)	0.40-0.60 MPa		
Module E 100% (ISO 8339)	0.20-0.30 MPa		
Elongation at break (ISO 8339)	600-700%		
Tensile Strength (ISO 37 rod 1)	1.00-1.40 MPa		
Elongation at break (ISO 37 rod)	500-700%		
Service temperature	-40 ℃ to +90 ℃		
Maximum joint depth	20 mm		
Maximum joint width	20 mm		
Good chemical resistance	To water, mild solvents, mineral oils, fat, low concentration anorganic acids and bases		

V. Package Description

Part Number Size

8312 300g cartridge

VI. Special Precautions

General:

Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Dispose of empty containers safely. All unused product should be disposed of in conformance with local and HSNO regulations, do not contaminate water supply.

First Aid:

Swallowed – Rinse mouth with water.

Eye – Wash with running water. For discomfort seek medical advice.

Skin - Wash with water and soap.

Inhaled – Fresh air. Rest, keep warm.

Refer to Material Safety Data Sheet for more details.

TECHNICAL DATA SHEET Version 10/2011

PRODUCT WARRANTY: CRC offers a conditional warranty of this product for the period of 2 years from the date of manufacture.

DISCLAIMER: All information on this data sheet is based on testing by CRC Industries NZ. All products should be tested for suitability on a particular application prior to actual use. CRC Industries makes no representations or warranties of any kind concerning this data.