

# MasterJoint CHR 435 (formerly MasterSeal CR 435)

High performance chemically resistant polyurea hybrid joint sealant

## Material Description

**MasterJoint CHR 435** is a two component, chemically curing, hybrid polyurea sealant. **MasterJoint CHR 435** exhibits high chemical resistance, moisture insensitivity during curing and is UV stable, non colourfast, resulting in good durability.

## Areas of Application

Active, exterior and interior joints that demand extreme chemical resistance. **MasterJoint CHR 435** is used in conjunction with Ucrete flooring surfaces where resistance to heat, moisture and chemicals is required. **MasterJoint CHR 435** can be used on horizontal applications including trafficable surfaces on floors and bunds. Substrates include concrete, polyurethane concrete, novalac epoxies and chemically resistant epoxies.

## Characteristics & Benefits

- Chemically resistant, UV stable -non colourfast- polyurea technology- non-staining and non-chalking, suitable for both internal and external in covered applications.
- Medium modulus - excellent puncture and abrasion resistance for heavy traffic areas.
- Easily gunable and low viscosity - easy tooling and finishing.
- Chemical cure – cures independently of the ambient temperature or relative humidity and will cure at or near freezing.
- Movement capability  $\pm 25\%$  - expands and contracts with joint movement.
- Excellent chemical resistance - ideal in food or petroleum environments.
- Fast cure- allows return to service after one hour at 20°C

## Performance Data

Property	Test Method	Value (Average)
Movement capability (MAF)	ASTM C 719	$\pm 25\%$
Tensile strength	ASTM D 638	7.8 MPa
Ultimate elongation at break	ASTM D 638	340%
Hardness at standard conditions (Shore A)	ASTM C 661	75-80
Tack-free time	ASTM C 679	Less than 1 hour
Stain and colour change	ASTM C 510	None
Volatile Organic Compounds (VOC)	SCAQMD Method 304-91	90g/litre
Service temperature range (°C)		-40 to 82
	Part A	Part B
Mix ratio	100	100
Viscosity @ 25°C (ASTM D-1638)	1000 cps	1100 cps
Colour		grey
Specific gravity	1.1 kg/l	1.06kg/l

*Note: The data represents information typically required to verify performance.*

## Estimating Data

Joint Size (mm)	Metres per litre
5 x 5	40
10 x 10	10
12 x 12	7
15 x 7.5	9
20 x 10	5.00

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## Application

For information on joint design, surface preparation and priming, refer to "Application Guide for " Joint Sealants" available from Master Builders Solutions office or website.

### Application

- **MasterJoint CHR 435** comes in a 300ml:300ml side by side cartridge and is mixed when extruded through a static mixer. Apply by professional dual cartridge gun. Unused material can be resealed for later use and static mixer is discarded.
- Fill joints from deepest point to the surface by holding a suitably sized nozzle against the back of the joint.
- Dry tooling is recommended. DO NOT use soapy water when tooling. Tooling results in the correct bead shape, a neat joint, and maximum adhesion.

### For Best Performance

- Do not allow uncured **MasterJoint CHR 435** to come into contact with alcohol-based materials or solvents.
- **MasterJoint CHR 435** should not come in contact with oil-based caulking, polysulfides or fillers impregnated with oil, asphalt or tar.
- Protect unopened containers from heat and direct sunshine.
- **MasterJoint CHR 435** can be applied below freezing temperatures only if substrates are completely dry, free of ice or frost, and clean.

## Curing

The cure of **MasterJoint CHR 435** is independent of the ambient temperature and will gel in 3 - 4 minutes. The material will be trafficable in about 1 hour and suitable for full chemical contact in 24 hours. Cure is independent of joint thickness.

## Cleaning

Immediately after use, remove the static mixer and discard. Reinsert the plug into the top of the cartridge and replace the

screw cap to reuse the material at a later time. Clean equipment with thinners. Use proper precautions when handling solvents. Remove cured sealant by cutting with a sharp edge tool. Remove thin films by abrading.

## Packaging

15 dual cartridges to a carton. 5 static mixers per carton.

## Storage & Shelf Life

Store in original, unopened packaging under normal conditions. **MasterJoint CHR 435** has shelf life of 24 months. Pigment may have settled whilst in storage and can be reconstituted by turning the cartridge upside down for a few hours and then shaking until homogeneous.

## Precautions

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the Safety Data Sheet (SDS) from our office or website.

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## Disclaimer

MasterJoint-CHR 435-ANZ-VI-0924

### STATEMENT OF RESPONSIBILITY

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