**MACSIM**<sup>®</sup>

**Tradesmans Choice** 

**MS602** 

**JOIN N FLEX** 

**Polyurethane HYBRID** 



**Technical Data Sheet** 

# **DESCRIPTION**

Join n Flex is a low modulus, Hybrid Polyurethane, flexible joint sealant and adhesive that is free of Isocyanate and other hazardous raw materials and omits low odour. Join n Flex has been formulated to offer outstanding adhesion to most common building and automotive materials; such as Aluminium, timber, concrete, fibreglass and can be used in most sealing and joint filling applications.

Join n Flex displays high joint movement capability with no sagging or slump characteristics to provide a high quality & efficient join finish.

# **APPLICATIONS**

Join n Flex is suitable for:

- · Construction Joint Sealant applications
- · Perimeter seals around doors, windows and facades
- General purpose interior joint sealant applications
- Sealing and bonding metal roofing systems
- Automotive and marine applications requiring a flexible adhesion profile between substrates
- Sound dampening measures: Suitable for the interface of anti-corrosion seals in areas of rivets, bolts & hinges.

### **Substrates:**

- Precast concrete panels
- Fibre Cement Sheet
- · Block work & Bricks
- Aluminium profiles
- Sandstone & Granite
- Fiberglass
- Plasterboard & Blue Board

## **ADVANTAGES**

- Solvent & Isocyanate Free
- Low VOC
- Low odour
- Non corrosive
- Joint movement total 50%
- Non slump
- Paintable

PRODUCT CHARACTERISTICS	
Colour	Black / Grey
Appearance	Thixotropic, non sag paste
Composition	Polyurethane HYBRID
Curing Method	Moisture curing
Service Temperature	-40°C to +90°C
Product Codes 600ml Sausage	Grey: 53HJNFSG Black: 53HJNFSB

TYPICAL PROPERTIES	
Movement Capability	Total 50%
Elongation @ Break	Approx. >450%
Skinning Time	Approx. 35 mins @ 25°C, 50% Relative Humidity
Tack Free Time	60 minutes
Rate of Cure	2.5mm per 24 hours
Shore A. Hardness	45 ± 5
Specific Gravity	1.6g/mL (DIN 52451-A)
Tensile Strength	0.7N/mm <sup>2</sup>
Application Temperature	+5°C to +45°C
VOC Rating	34g/mL (3.4%)

NOTE: All data provided is based on 25°C and 50% Humidity Conditions & fully cured after 21 days.

### INSTRUCTIONS FOR USE

Read and understand the Safety Data Sheet before using this product. SDS can be acquired by visiting www.macsim.com.au

#### **Surface Preparation**

Surfaces to be bonded must be clean and dry, as well as free of wax, grease, dust and any other foreign materials so that the adhesive bond is not compromised.

## **Priming**

It is advisable to conduct preliminary adhesion tests on substrates where the application is critical or if the adhesion performance is unknown.

## **Applications Instructions**

Cut nozzle at a sharp angle slightly wider than the desired Bead or joint width. If being installed as a joint sealant, always use a suitable backing rod to ensure the correct depth is achieved. The joint depth should be half of the joint width. Extrude sealant with a gun and tool with a round spatula within 10 minutes to spread the sealant against joint surfaces.

#### **Joint Design**

- Join n Flex has a high body designed not to slump in joints up to 40mm in width.
- To allow the sealant to move effectively, the correct joint design requires that the sealant depth must be half of the width of the joint.
- A suitable closed cell must be used to ensure that the correct joint depth is achieved.

#### Limitations

- Join n Flex will bond to most common construction substrates, however an adhesion test on sample substrates should be conducted to ensure adequate adhesion in the finished application.
- In waterproofing applications, Join n Flex should be left to cure a minimum of 8 hours prior to being covered by any membrane/ sealer system.
- Tests should be conducted to ensure that there are no adverse reactions between Join n Flex and a membrane coating system.
- Will not adhere to some plastics, polyethylene, polypropylene & Teflon.

# Curina

Cure speed is dependent upon the temperature, humidity, depth of sealant and substrate. Typically, a joint will form a firm skin in one hour and takes up to seven days to fully cure. In cold or very humid climates, the cure time may extend beyond seven days.

# **Shelf Life**

18 months shelf life when stored in a dry environment and between +5°C and +25°C.

### Cleaning

Cured material removed by mechanical means only.

# Disposal

Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

#### **HEALTH & SAFETY**

#### Safety

If poisoning occurs, contact Poisons Information Centre: Australia: 13 11 26; New Zealand: 0800 764 766.

KEEP OUT OF REACH OF CHILDREN Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Handle under inert gas. Protect from moisture. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from any possible contact with water, because of violent reaction and possible flash fire.

#### First Aid

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician. Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Take off contaminated clothing and wash before reuse. In case of fire: Use alcohol resistant foam or normal protein foam for extinction. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

### **DISCLAIMER**

The information in this Technical Data Sheet (TDS) is based on our present knowledge to the date of the publication. However, this shall not constitute a guarantee for any specific product features and shall not establish a ;legally valid contractual relationship. It is only a guide for safe handling, use, storage, transporting and disposal of the product.

