## **MACSIM®**

# **Tradesmans Choice**

**DUCT SEALANT** 

**Water Based Acrylic** 



Technical Data Sheet

## **DESCRIPTION**

MF90 Duct sealant is a water based acrylic fire stop sealant that provides movement capability for fire-rated joint applications. It has four hours fire rating under BS EN 1366-4: 2006. It is almost odour free and in not corrosive towards metals. After drying, it forms a tough elastic seal.

### **APPLICATIONS**

MF90 Duct Sealant is suitable for:

- Heating & cooling air conditioning ducts
- Indoor joints with fire retardant requirements such as: joints between walls and ceiling, joints around pipe and cable work, perimeter sealing of fire rated doors and window.

#### **ADVANTAGES**

- Non corrosive towards metals
- After drying it forms a tough elastic seal
- Good primerless adhesion on most substrates

PRODUCT CHARACTERISTICS	
Colour	Grey
Appearance	Soft paste
Curing Method	Water evaporation
Service Temperature	-10°C to +75°C
Product Codes	300ml Cartridge: 53MDS 5 Litre Bucket: 53MDS5

TYPICAL PROPERTIES	
Base	Acrylic Emulsion
Elongation @ Break	>100% (ASTM D412)
Skinning Time	<10 minutes @ 25°C, 50% Relative Humidity
Shore A. Hardness	30-40 (ASTM C661)
Specific Gravity	1.45-1.50g/mL
Tensile Strength	>0.3 N/mm² (ASTM D412)
Application Temperature	+5°C to +40°C
VOC Content	74g/L
Low VOC Compliance	SCAQMD Rule #1168
NOTE: All data provided is based on 25°C and 50% Humidity Conditions	

#### **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**

Substrate surface must be dry and clean, free of dirt, grease, oil, or standing water. Use the two-cloth method to clean if surface is dirty. For a neat finish, use masking tape and remove it within the working time. For sealant design with depths of over 10mm, use approved backing materials.

#### **Applications Instructions**

- 1. Surfaces must be clean, dry and free of dirt, grease, oil or water.
- 2. Surfaces should be cleaned with alcohol, M.E.K. or other suitable solvent. Do not use soap or detergent.
- 3. For a neat finish, apply masking tape and remove it before sealant skins over.
- 4. Cut nozzle at 45° angle to desired bead-width and apply to substrate with caulking gun.
- 5. Tool the sealant within 10 minutes of extrusion before it skins.
- 6. Allow to dry for one hour before applying water-based paint and 24 hours for oil-based paint.
- 7. Uncured sealant can be cleaned up with damp cloth.

#### Clean Up

- Wet sealants can be cleaned up with acetone or mineral spirits.
- Cured sealants can only be removed mechanically.

#### **Limitations**

MF90 Duct Sealant is not suitable for the following applications

- Continuous water immersion and not for PE, PP, Teflon and bituminous surfaces.
- Painting over with highly filled emulsion paints can cause cracks in paint film.

#### **Joint Design**

- The specified sealant bead size should be calculated to comply with the compression and extension capabilities of the sealant in relation to the anticipated joint width due to expansion and contraction.
- Minimum bead size should not be less than 3mm to accommodate movement.
- Sealant design joint width-to-depth ration should be 2:1.

#### **Shelf Life**

24 months shelf life when stored in a dry and cool place with temperature below 30°C. (Do not store below 5°C)

#### **HEALTH & SAFETY**

#### Safety

Duct Sealant is non-hazardous. If poisoning occurs, contact Poisons Information Centre: Australia: 13 11 26; New Zealand: 0800 764 766.

For more information and advice on the safe handling, storage and disposal of this product refer to the Safety Data Sheet. The can be acquired by visiting www.macsim.com.au

#### 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.

