



ENGINEERING STANDARDS

Material Specification

LIMITED USE
HN2377

Sealer Performed, Weldable High Expansion 100-200%

Do Not Use on New Programs; No Replacement

1. SCOPE

This specification details the requirements of an extruded weld through tape which will expand approximately 100-200% and cure upon heating. The material is tacky one side, and is intended for sealing interior and exterior body joints against water, dust and air intrusion.

The material must be a smooth and homogeneous mixture free of air, lumps, unmixed particles and foreign materials. Material must not contain chlorine or produce an unpleasant odour upon welding.

After removal of the release paper, the material must have satisfactory pressure sensitive tack and adhere to oily surfaces such as steel, zinc coated steel and galvanised metal. It must have good weatherability and must not accelerate corrosion of the substrate over which it is applied.

2. REFERENCES

ASTM D792	ASTM D5	GM9832P	GM9010P
GM9037P	GM9640P	HN 0256	HN 0214
GM9773P	GM9828P	GM9831P	HN 1000
GM9929			

3. REQUIREMENTS

3.1 Physical Properties

Physical Properties	Results	Test Method
Specific Gravity (as received)	1.2	ASTM D792
Uncured Hardness (50g load, 5s, needle penetrometer)	5-15mm	ASTM D5
Odour	Non-toxic, Not unpleasant	GM9832P

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Physical Properties	Results	Test Method
Toxicity	Non toxic	-
Solids content	>95% min	GM9010P
Water absorption	<2%	GM9640P
Expansion @1.25mm, 20 min @ 170°C 20 min @ 205°C	135% 143%	GM9037P

3.2 Adhesion

3.2.1 A 80mm x 150mm sealer patch will be applied to oiled (3g/m²): cold rolled steel, zinc coated steel and galvanised steel panels (100mm x 300mm) respectively.

Panels will be baked for:

(i) Under bake

20 min at 170°C + 40 min at 140°C

(ii) Standard bake

30 min at 180°C + 50 min at 145°C

(iii) Over bake

60 min at 180°C + 50 min at 145°C

3.2.2 The sealer must not crack or lose adhesion to the oily metal steel panels during or after the following conditions:

(i) Initial

After cooling at ambient conditions for 24h.

(ii) Heat Ageing

336h @70C