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15th of July, 2016

M.S.T.C. TEST REPORT T16-00312/0001

Company:	R & D Technology Pty. Ltd.		
Sample Description:	LWS-150-10 – injection moulded copolymer polypropylene Lanyard Wire Support		
Intended Use:	Non-Defined Application	[Refer MDG3608, Section 7]	
Sample No.:	T16-00312/0001		



SUMMARY

As the projected surface area of the assessed injection moulded non-metallic material is less than the 10,000 mm² 'Limitation of Surface areas' outlined in Section 7.4 of AS/NZS 60079-0, the material satisfies the electrostatic charge requirements of AS/NZS 60079-0 for non-metallic materials used in 'Group 1' explosive atmospheres.

Analysed by:



Checked by:



Authorised by:

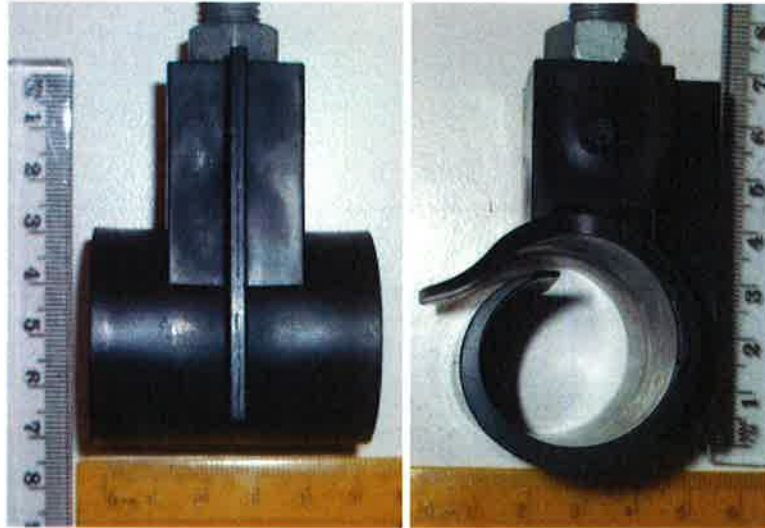


G. Slater
Manager, Mine Safety Technology Centre

ELECTRICAL RESISTANCE

Sample:

LWS-150-10 – injection moulded copolymer polypropylene Lanyard Wire Support



Maximum height of the injection moulded non-metallic sample = 65 mm

Maximum width of the injected moulded non-metallic sample = 50 mm

⇒ Maximum 'projected' surface area of the *LWS-150-10* Lanyard Wire Support < (50 mm x 65 mm)

$$50 \text{ mm} \times 65 \text{ mm} = 3,250 \text{ mm}^2$$

→ the maximum projected surface area of the *LWS-150-10* sample is < **3,250 mm²**

Requirements:

Clause 7.4.2 b) of *AS/NZS 60079-0;2012* states that the requirement to avoid the danger of ignition due to electrostatic charges shall be satisfied by limitation of the surface area of non-metallic parts of enclosures to $\leq 10,000 \text{ mm}^2$ for Group 1 equipment (- as shown in Table 6).

The surface area for curved objects shall be the projection of the object giving the maximum area.

Sample Status:

As the maximum projected surface area of the submitted sample is less than the $10,000 \text{ mm}^2$ 'Limitation of Surface areas' outlined in Section 7.4 of *AS/NZS 60079-0*, the assessed sample satisfies the electrostatic charge requirements of *AS/NZS 60079-0* for non-metallic materials used in 'Group 1' explosive atmospheres.