



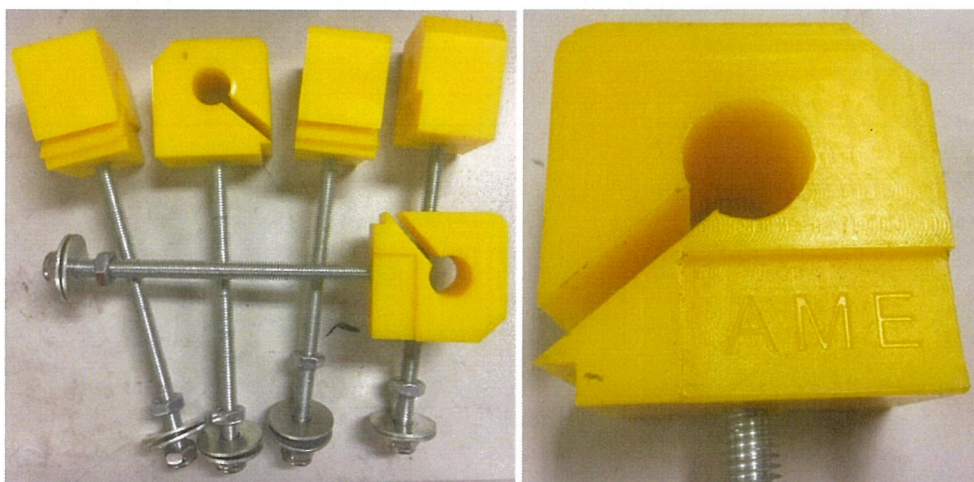
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24 October 2024

TEST REPORT No.: 24-0264/03

Report Version: 1

Sample Description:	<i>Poly block conveyor lanyard standoff</i> – approx. 60 mm x 60 mm x 40 mm yellow poly
Intended Use:	Non-defined applications



Figs. 1a & 1b: Supplied samples

SUMMARY

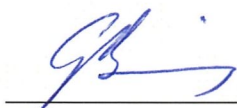
The material **complied** with the Fire resistance performance requirements of *Technical reference guide: Non-metallic materials for underground coal mines & reclaim tunnels in coal mines (TRG3608)*, Clause 6.3.1.2.

37 mm thick material **complied** with the Electrical resistance performance requirements of *Technical reference guide: Non-metallic materials for underground coal mines & reclaim tunnels in coal mines (TRG3608)*, Clause 6.3.3.3 for 'Discharge between two surfaces'.

Analysed by: C. Teasdale

Checked by: 

Authorised by:



G. Browning
Laboratory Manager
Mine Safety Laboratory

Independent testing is required to verify conformance to the original design specification whenever a change in the raw materials, formulation or manufacturing process occurs – and when the manufactured product no longer meets the design specifications.



Fire resistance

Sample:

Poly block conveyor lanyard standoff – approx. 60 mm x 60 mm x 40 mm yellow poly blocks

Test Date & Location:

19 October 2024; Mine Safety Laboratory, Thornton

Method of Analysis:

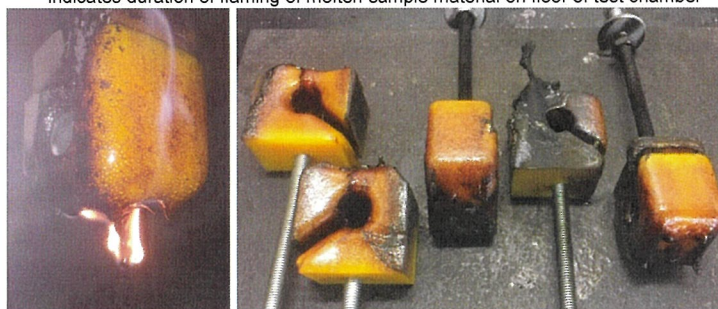
AS 1180.10B:1982 - Determination of combustion propagation characteristics of a horizontally oriented specimen of hose using surface ignition (– modified for irregularly shaped supplied samples)

Results:

TABLE 1

Test No.	Flame Exposed Sample Length (mm)	Flame Persistence (s)	After Glow Persistence (s)
1	60	1	0
2	60	1	0
3	40	5*	0
4	40	20	0
5	40	4*	0
6	60	7*	0
Mean		6 s	-

* indicates duration of flaming of molten sample material on floor of test chamber



Figs. 2a & 2b: Sample flaming during testing and sample pieces after testing

Notes:

- The test results relate only to the behaviour of the pieces under the particular conditions of the modified test; they shall not be used as a means of assessing the potential fire hazard of the product in use.
- This testing has not been independently technically verified.
- Flame temperature: approx. (957 – 971)°C.

Any variation from Standard/Test Method:

The Analite #T203 burner replaced with a Bunsen type burner in accordance with the annex to ISO340; test pieces did not have method-specified 300 mm lengths.

Requirements:

When tested in accordance with AS1180.10B:1982, the average duration of the flame and glowing combined should not exceed 30 seconds.

Sample Status

The material **complied** with the Fire resistance performance requirements of TRG3608, Clause 6.3.1.2.

Independent testing is required to verify conformance to the original design specification whenever a change in the raw materials, formulation or manufacturing process occurs – and when the manufactured product no longer meets the design specifications.



Electrical resistance – Discharge between two surfaces

Sample: Poly block conveyor lanyard standoff
– approx. 60 mm x 60 mm x 40 mm yellow poly blocks

Test Date & Location: 19 September 2024; Mine Safety Laboratory, Thornton

Method of Analysis: ISO 2878:2017 (Rubber, vulcanized or thermoplastic - Antistatic and conductive products – Determination of electrical resistance), Cls 9.2

Results:

TABLE 2

Test	Test Piece Thickness (mm)	'Through' Electrical Resistance (MΩ)
1	37	203
2	37	227
3	37.5	243
4	37	212
5	37.5	205
	Mean	218 MΩ

Notes:

- Results apply only to the samples as received.
- Conditioned at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for > 16 hours.
- Tested at ambient temperature of 22°C with 51.5% relative humidity.
- Conductivity solution was applied between electrodes & sample surfaces.
- Resistance readings taken (5 ± 1) s after application of voltage between electrodes.
- This testing has not been independently technically verified.

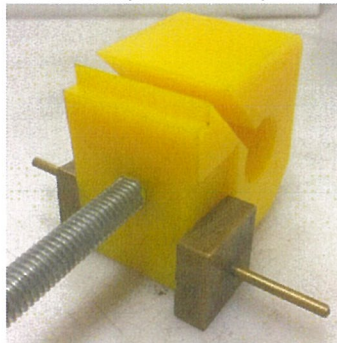


Fig. 3: Positioning of electrodes on each sample piece for measurements

Any variation from Standard/Test Method:

Clause 9.2 ('Test Between Two Surfaces') performed only.
Samples could not provide full surface contact with flat 25 mm² electrodes.

Requirements:

Clause 6.3.3.3 of TRG3608 states that, where the normal electrical discharge path is between two surfaces the average resistance measurements shall not exceed 300 MΩ when tested in accordance with ISO 2878.

Sample Status:

37 mm thick material **complied** with the Electrical resistance performance requirements of TRG3608, Clause 6.3.3.3 for 'Discharge between two surfaces'.

Independent testing is required to verify conformance to the original design specification whenever a change in the raw materials, formulation or manufacturing process occurs – and when the manufactured product no longer meets the design specifications.