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MALAYSIA

25 February 2026

TEST REPORT No.: 26-0001/04

Report Version: 1

| | |
|--------------------------------------|--|
| Customer Advised Sample Description: | H5000 RYCO® DIEHARD™ H5016D 1" -16 DN25 – approx. 25 mm ID, 37 mm OD isobaric hydraulic hose with spiralled high tensile steel wire reinforcement; MAX WP 350 bar/5100 PSI [0575/251104 0021721095] |
| Customer Advised Usage of Material: | Hydraulic Hose [refer TRG3608, Sect 5.2] |

SUMMARY

The material **complied** with the Fire resistance performance requirements of TRG3608 (July 2024), 5.2.2.1.

The material **complied** with the Electrical resistance performance requirements of TRG3608 (July 2024), 5.2.2.2.

Analysed by: C. Teasdale

Checked by: *H. Reppert*

Authorised by:

H. Reppert
H. Reppert
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.



Figs 1a – 1c: Supplied samples

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FIRE RESISTANCE

Sample: H5000 RYCO® DIEHARD™ H5016D 1" -16 DN25 – approx. 25 mm ID, 37 mm OD isobaric hydraulic hose with spiralled high tensile steel wire reinforcement; MAX WP 350 bar/5100 PSI [0575/251104 0021721095]

Test Date & Location: 24 February 2026; Mine Safety Laboratory, Thornton

Method of Analysis: ISO8030 (Rubber and plastics hoses – Method of test for flammability.)

Results:

TABLE 1

| Sample | Sample Length (mm) | Flame Persistence (s) | After Glow Persistence (s) |
|-------------|--------------------|-----------------------|----------------------------|
| 1 | 298 | 0 | 0 |
| 2 | 302 | 0 | 0 |
| 3 | 295 | 0 | 0 |
| 4 | 298 | 0 | 0 |
| 5 | 298 | 0 | 0 |
| 6 | 300 | 0 | 0 |
| Mean | | 0 s | 0 s |



Fig. 2: Sample pieces after testing

Notes:

The results relate only to the behaviour of the test piece under the particular conditions of the test; they shall not be used as a means of assessing the potential fire hazard of the product in use. Flame temperature: (982 – 1001)°C.

Any variation from Standard/Test Method:

The Analite No T203 burner replaced with a Bunsen type burner in accordance with the annex to ISO340; sample sizes as received.

Requirements:

When tested in accordance with ISO 8030, the average persistence time of flaming or glow of 6 pieces of hose - after withdrawal of the ignition flame - shall be ≤ 30 s. (- per Clause 6.3 of ISO 6805:2020.)

Sample Status:

The material **complied** with the Fire resistance performance requirement of TRG3608 (July 2024), 5.2.2.1.

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

Sample: H5000 RYCO® DIEHARD™ H5016D 1” -16 DN25 – approx. 25 mm ID, 37 mm OD isobaric hydraulic hose with spiralled high tensile steel wire reinforcement; MAX WP 350 bar/5100 PSI [0575/251104 0021721095]

Test Date & Location: 23 February 2026; Mine Safety Laboratory, Thornton

Method of Analysis: ISO 8031 (Rubber and plastics hoses and hose assemblies – Determination of electrical resistance and conductivity).

Results:

TABLE 2

| Measurement | Test Piece | Measured Electrical Resistance (MΩ) | Electrode Spacing | CALCULATED Resistance per metre length |
|------------------|------------|-------------------------------------|-------------------|--|
| Inner Surface | 1 | < 0.1* | 0.25 m | < 0.4 MΩ.m ⁻¹ |
| | 2 | < 0.1* | 0.25 m | < 0.4 MΩ.m ⁻¹ |
| | 3 | < 0.1* | 0.25 m | < 0.4 MΩ.m ⁻¹ |
| | 4 | < 0.1* | 0.25 m | < 0.4 MΩ.m ⁻¹ |
| | 5 | < 0.1* | 0.25 m | < 0.4 MΩ.m ⁻¹ |
| Mean Resistance: | | | Mean Resistance: | |
| Outer Surface | 1 | 0.14 | 0.10 m | 1.4 MΩ.m ⁻¹ |
| | 2 | 0.17 | 0.10 m | 1.7 MΩ.m ⁻¹ |
| | 3 | 0.16 | 0.10 m | 1.6 MΩ.m ⁻¹ |
| | 4 | 0.18 | 0.10 m | 1.8 MΩ.m ⁻¹ |
| | 5 | 0.17 | 0.10 m | 1.7 MΩ.m ⁻¹ |
| Mean Resistance: | | | 1.6 MΩ/m | |

* indicates the resistance was below the lower limit of measurement of the measurement device

Notes:

- a) Test specimens placed on wooden blocks on insulating polyethylene plate block during test.
- b) Approx. laboratory ambient conditions during testing: 22.2°C, 54.7% relative humidity.
- c) Sample lengths: approx. 295 mm - 302 mm.
- d) Samples conditioned in an unrestrained state at (23 ± 2)°C and (50 ± 5)% RH for > 16 hours.
- e) Conductive liquid was applied between electrodes and sample outer surface during testing.
- f) Resistance measurements recorded 5 s after the application of 500V d.c.

Any variation from Standard/Test Method:

Sample lengths as received.

Requirements:

When 5 hose lengths are tested in accordance with ISO 8031, the electrical resistance measured between electrodes as described shall be ≤ 2 MΩ/m for all hoses (- per Cls 6.2, ISO 6805:2020).

Sample Status:

The material **complied** with the Electrical resistance performance requirements of TRG3608 (July 2024), 5.2.2.2.

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.