



Versatile Permeability Instruments and Testing

PERMEABILITY LABORATORY TEST REPORT

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PRIVATE AND CONFIDENTIAL

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Sample Identification

Samples of Hydroprufe 8000 were received. The paper release sheet was removed before testing.

Equipment Used

Versaperm Permeability Meter MK IV, configured to run ISO15105-1 different pressure method.

Test Conditions

Sample Conditioning: Samples were stored for 2 days in a desiccator at 23°C. The samples were later stored in a degassing chamber for 1 week to reduce outgassing.

Test Gas: Methane CP Grade. CO2 CP Grade

Temperature: 23°C

Atmospheric Pressure: 998hPa

Test Methods

Methane Transmission Rate.

This test was carried out using the method ISO 15105-1 Plastics - Film and sheeting - Determination of gas-transmission rate - Part 1: Differential-pressure methods. After conditioning, each sample was placed in the standard film measuring chamber and controlled temperature environment, evacuating the gas from both sides of the sample, then supplying the test gas upstream of the sample at 0.3 bar differential pressure. The pressure downstream was monitored as the rate of change is proportional to the permeation rate. An additional set of tests was performed under vacuum without any differential pressure to compensate for any leaks on the surfaces in the rig. Results are expressed as ml/m².day

Test Results

Trade Name/ Indentification	Test Gas	Nominal Thickness/ mm	Gas Transmission Rate (GTR) / ml/m².day			
			1	2	3	Average
Hydroprufe 8000	Methane	1.80	<10	<10	<10	<10
Hydroprufe 8000	Carbon Dioxide	1.80	<10	<10	<10	<10

Conclusions

The sample showed results that were below the resolution of the instrument for this type of sample and method.

