# DIN EN 14125:2013-09 (E)

## Thermoplastic and flexible m etal pipework for underground installation at petrol filling stations

## Contents

Page


Foreword ..... 4

Introduction ..... 5

1 Scope ..... 6

2 Normative references ..... 6

3 Terms and definitions ..... 8

4 Classes and dimensions ..... 9
4.1 Classes of pipework ..... 9
4.2 Fittings ..... 9
4.3 Dimensional tolerances ..... 9

5 Physical properties ..... 10
5.1 Pressure ..... 10
5.1.1 General ..... 10
5.1.2 Hydrostatic pressure ..... 10
5.1.3 Vacuum ..... 10
5.1.4 Cyclic pressure ..... 11
5.2 Estimated working life ..... 11
5.3 Temperature ..... 11
5.4 Mechanical tests ..... 11
5.4.1 Crush test ..... 11
5.4.2 Bend radius test ..... 12
5.4.3 Impact test ..... 12
5.4.4 Puncture test ..... 12
5.4.5 Pull test ..... 12
5.5 Fuel tests ..... 13
5.5.1 Fuel compatibility ..... 13
5.5.2 Fuel permeability ..... 13
5.5.3 Swelling ..... 13
5.6 Static electricity ..... 14
5.6.1 General ..... 14
5.6.2 Requirements for insulating plastic pipe systems ..... 14
5.6.3 Requirements for plastic pipe systems with conductive or dissipative linings ..... 14
5.7 Weathering ..... 14
5.8 Corrosion resistance ..... 14
5.9 Summary of tests ..... 15

6 Production control ..... 15

7 Testing ..... 16
7.1 General items referring to the test methods ..... 16
7.1.1 Selection of test samples from a product range ..... 16
7.1.2 Number of samples ..... 16
7.1.3 Tests following conditioning ..... 16
7.1.4 Combined tests ..... 17
7.1.5 Procedure for retesting ..... 17
7.1.6 Test Fuels ..... 17

7.2 Test methods ..... 18
7.2.1 Hydrostatic pressure ..... 18
7.2.2 Vacuum test ..... 18
7.2.3 Cyclic pressure test ..... 19
7.2.4 Crush test ..... 19
7.2.5 Bend radius test ..... 19
7.2.6 Impact test ..... 20
7.2.7 Puncture resistance ..... 20
7.2.8 Fuel compatibility test ..... 21
7.2.9 Fuel permeability test ..... 22
7.2.10 Longitudinal swelling ..... 22
7.2.11 Pull-out test ..... 23
7.2.12 Fitting Pull-out test ..... 23

8 Markings on pipe and fittings ..... 23

9 Manuals ..... 24
9.1 Product manual ..... 24
9.2 Installation manuals ..... 25

10 Records ..... 25

Annex A (informative) A-deviations ..... 26

Annex B (informative) Static Electricity ..... 28

B.1 General ..... 28
B.2 Delivering fuels to underground tanks ..... 29
B.2.1 Systems with metal pipes ..... 29
B.2.2 Systems with plastic pipes ..... 29

Bibliography ..... 32