

# DIN EN 16436-1:2018-12 (E)

Rubber and plastics hoses, tubing and assemblies for use with propane and butane and their mixtures in the vapour phase - Part 1: Hoses and tubings (includes Amendment A2:2018)

---

## Contents

	Page
European foreword .....	3
1 Scope .....	4
2 Normative references .....	4
3 Terms and definitions .....	5
4 Classification of tubing and hose .....	5
5 Materials and construction of tubing and hoses .....	6
6 Dimensions of tubing and hoses .....	7
6.1 Inside diameters, wall thicknesses and concentricity .....	7
6.2 Measurement of ovality .....	7
7 Properties of materials for tubing, lining and cover of hoses .....	7
7.1 Tensile strength and elongation at break .....	7
7.2 Accelerated ageing .....	8
7.3 Resistance to n-pentane .....	8
8 Performance requirements of tubing and hoses .....	8
8.1 Visible defects evaluation .....	8
8.2 Cleanliness .....	8
8.3 Pressure requirements .....	8
8.4 Adhesion in hoses .....	9
8.5 Resistance to kinking .....	9
8.6 Resistance to crushing .....	9
8.7 Low temperature flexibility .....	9
8.8 Flame propagation .....	9
8.9 Permeability to propane .....	9
8.10 Resistance to ozone .....	10
8.11 UV (xenon arc lamp) test .....	10
8.12 Loss in mass on heating (for non vulcanized (plastics) materials only) .....	10
8.13 Durability of the marking .....	10
9 Marking .....	10
Annex A (normative) Test methods for tubing and hoses .....	12
!Annex B (informative) A-deviations" .....	18
Bibliography .....	19