

# ISO 16486-1:2023-12 (E)

## Plastics piping systems for the supply of gaseous fuels - Unplasticized polyamide (PA-U) piping systems with fusion jointing and mechanical jointing - Part 1: General

<b>Contents</b>		<b>Page</b>
<b>Foreword</b> .....		<b>iv</b>
<b>Introduction</b> .....		<b>v</b>
<b>1 Scope</b> .....		<b>1</b>
<b>2 Normative references</b> .....		<b>1</b>
<b>3 Terms and definitions</b> .....		<b>2</b>
3.1 Terms related to geometrical characteristics .....		3
3.2 Terms related to materials .....		3
3.3 Terms related to material characteristics .....		4
3.4 Terms related to service conditions .....		4
<b>4 Symbols and abbreviated terms</b> .....		<b>5</b>
4.1 Symbols.....		5
4.2 Abbreviated terms .....		5
<b>5 Material</b> .....		<b>6</b>
5.1 Material of the components .....		6
5.2 Compound.....		6
5.2.1 Additives.....		6
5.2.2 Colour.....		6
5.2.3 Identification compound.....		6
5.2.4 Virgin material.....		6
5.2.5 Characteristics.....		6
5.2.6 Change of compound formulation.....		9
5.3 Fusion compatibility.....		9
5.4 Classification and designation.....		9
5.5 Maximum operating pressure (MOP) .....		10
5.6 Effects of transport of liquid hydrocarbons and hydrogen.....		10
<b>Annex A (normative) Chemical resistance</b> .....		<b>11</b>
<b>Annex B (normative) Hoop stress at burst</b> .....		<b>14</b>
<b>Annex C (informative) Continuous liquid hydrocarbon exposure from transported fluid or soil contamination</b> .....		<b>16</b>
<b>Annex D (informative) Permeation of different gases</b> .....		<b>17</b>
<b>Bibliography</b> .....		<b>22</b>