

# ISO/TS 11899-1:2023-11 (E)

## Fine bubble technology - Transportation and dispensing systems for agro- and aqua-cultural applications - Part 1: Ultrafine bubble concentration loss in ultrafine bubble water passing through long-distance plastic pipes

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Testing method and data analysis .....	2
4.1	Basic testing method .....	2
4.2	Equipment and environment .....	3
4.2.1	Reservoir .....	3
4.2.2	Ultrafine bubble water .....	3
4.2.3	Pumping .....	4
4.2.4	Long winding pipe .....	4
4.2.5	Flow meter .....	4
4.2.6	Measuring instrument of number concentration index of ultrafine bubble .....	4
4.2.7	Sampling pipette and glass bottle .....	4
4.2.8	Thermometer .....	4
4.2.9	Stop watch .....	4
4.3	Test procedure .....	4
4.4	Data analysis .....	5
5	Test report .....	6
Annex A (informative)	Example of test and data analysis .....	7
Bibliography .....		13