

# ISO 21191:2021-02 (E)

## Equipment for crop protection - Closed transfer systems (CTS) - Performance specification

---

Contents		Page
Foreword .....		iv
1 Scope .....	1	1
2 Normative references .....		1
3 Terms and definitions .....		1
4 General requirements .....		2
5 Performance requirements .....		3
5.1 Leakage .....		3
5.1.1 General .....		3
5.1.2 Principle .....		3
5.1.3 Apparatus .....		3
5.1.4 Procedure .....		4
5.2 Container and system interface rinsing .....		5
5.2.1 General .....		5
5.2.2 Principle .....		5
5.2.3 Apparatus .....		5
5.2.4 Procedures .....		5
5.3 Transfer system residues .....		7
5.3.1 General .....		7
5.3.2 Principle .....		7
5.3.3 Apparatus .....		7
5.3.4 Procedure .....		8
5.4 Speed of operation test .....		8
5.4.1 General .....		8
5.4.2 Principle .....		8
5.4.3 Apparatus .....		8
5.4.4 Procedure .....		9
5.5 Measurement device accuracy .....		9
5.5.1 General .....		9
5.5.2 Principle .....		9
5.5.3 Apparatus .....		9
5.5.4 Procedure .....		10
5.5.5 Test report .....		10
6 Operator manual .....		10
Annex A (informative) Container closure to CTS interface -- Dimensions for a CTS interface to accommodate a 63 mm container neck .....		12
Annex B (normative) Test liquid .....		14
Annex C (Normative) System leakage test formulation .....		16
Annex D (informative) Test report -- Minimum contents .....		17