

DRAFT TANZANIA STANDARD

**Adhesives for Polyvinyl chloride (PVC) plastic pipes –
Specification**

Draft for Comments Only

TANZANIA BUREAU OF STANDARDS

Foreword

This Draft Tanzania Standard is being developed by Industrial and Laboratory Chemicals Technical Committee under supervision of the Chemicals Divisional Standards Committee and it is in accordance with the procedures of the Bureau.

This Draft Tanzania Standard has been prepared with assistance drawn from:

ASTM D2564 – 20 Standard Specification for Solvent Cements for Polyvinyl Chloride (PVC) Plastic Piping Systems, published by ASTM International.

In reporting results of a test or analysis made in accordance with this standard, if the final value, calculated or observed is to be rounded off, it shall be done in accordance with TZS 4 *Rounding off numerical values*.

Adhesives for Polyvinyl chloride (PVC) plastic pipes – Specification

1. Scope

This Draft Tanzania Standard specifies requirements, sampling and test methods for adhesives used in polyvinyl chloride (PVC) plastic pipes.

2. Normative References

The following referenced documents are indispensable for the application of this document, the latest edition of the referenced documents (including any amendments) applies;

ISO 15605, *Adhesives – Sampling*

ASTM D1084, *Standard Test Methods for Viscosity of Adhesives*

ASTM D2564 – 20 *Standard Specification for Solvent Cements for Polyvinyl Chloride (PVC) Plastic Piping Systems*,

3 Terms and definitions

For the purposes of this standard, the following terms and definitions shall apply.

3.1

adhesive

substance capable of holding materials together by surface attachment

3.2

adherend

body that is, or is intended to be, held to another body by an adhesive

3.3

shear

mode of application of a force to a joint that acts in the plane of the bond-line. The force may be applied in longitudinal compression or tension or torsion

3.4

viscosity

quantity expressing the magnitude of internal friction in a fluid resisting uniform flow

NOTE: The words “Polyvinyl chloride” and “Poly (Vinyl Chloride)” may be used interchangeably with the same abbreviation as “PVC”

4. Requirements

4.1 General requirement

The material shall be free from visible impurities and foreign matter.

4.2 Specific requirements

The material shall comply with the specific requirements in Table 1 when tested in accordance with the methods indicated therein.

Table 1 – Specific requirements of Adhesives for Polyvinyl chloride (PVC) plastic pipes

S/N	Characteristic	Requirement	Method of test
1.	Solid content; % min	10	ASTM D2564
2.	Viscosity, (MPa.s), min Regular-bodied Medium-bodied Heavy-bodied	90 500 1600	ASTM D1084
3.	Lap Shear Strength (MPa), min after 2-h curing time, after 16-h curing time, and after 72-h curing time.	1.7 3.4 6.2	ASTM D2564
4.	Hydrostatic Burst Strength after a 2-h curing time (MPa), min	2.8	
*MPa stand for mega pascal			

5. Packaging and marking

5.1 Packaging

The material shall be packaged in suitable sealed containers.

5.2 Marking

Each container shall bear the following information in English and/or Swahili written in prominent, legible and durable labelling:

- a) Name and type of the material.
- b) Manufacturer’s name and address.
- c) Recognized trade mark, if any.
- d) Net content.
- e) Batch number.
- f) Date of expiry.
- g) Applicable pictorial symbol to show hazardous nature.
- h) Instruction for use and storage condition.

6. Sampling

The material shall be sampled according to the method specified in ISO 15605.

