



POLYOL FOR ENERGY ABSORBING PUR FOAM

ESK-M5D13-A

1. SCOPE

The material defined by this specification is a modified polyether polyol (component A) with the necessary additives e.g. catalysts and stabilizer.

2. APPLICATION

This specification was released originally for material used for producing energy absorbing PUR foam for bumper shells.

3. REQUIREMENTS

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.4 VISCOSITY 2050 +/- 200 mPas

(ASTM D 2849, test temperature 25 +/- 0.5 °C, spindle no. 2, rotational frequency 12/minute)

3.5 DENSITY 1.04 +/- 0.02 Mg/m³

(FLTM BI 102-02, except test temperature 25 +/- 1 °C)

3.6 WATER CONTENT 4.75 +/- 0.25%
(ASTM D 2849)

3.7 FORMATION OF LUMPS

Pour 250 g of the component A, as delivered, through a wire mesh (width of mesh 0.8 mm). The material shall show no oversize residue.

3.8 COLOR Natural or according to Eng. drawing

3.9 FOAMING PROPERTIES

To determine the reactivity of the component A an interaction with component B (isocyanate) according to S-M4D4900-A will be carried out.

3.9.1 Ratio of Component 1 : 1.02

Date	Action	Revisions
2006 08 11	Revised	Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.10 & 4
1996 01 12	Revised	Updated & Revised para 3.4, 3.6, 3.9
1986 03 20	Released	SM/EQ5600TP



Documents
K. Gerhards
Document Sharing Hub



NOTE: The following test equipments are necessary to carry out the tests:

- a) Laboratory stirrer with a mixing rotor of approx. 60 mm in diameter. Speed of rotation approx. 1500/min
- b) Paper beaker, unparaffinated, approx. 850 cm³ content, diameter 89 mm, height 137 mm

SOURCE: Fa. Dr. Fred Stahl KG
Winzerstrasse 75

D-5300 Bonn 1

Tests shall be carried out at a temperature of 23 +/- 1 °C and 50 +/- 5% relative humidity.

Procedure:

Weigh into a paper cup with known tara weight 40.0 g of component A and 40.0 g of component B. Immediately after adding the component B stir the mixture for 10 s. Observe the foaming process and record with a stop watch the creaming time and rising time.

3.9.2 Creaming Time 23 +/- 3 s

Time in seconds from start of stirring until start of volume rise.

3.9.3 Rising Time 137 +/- 10 s

Time in seconds from start of stirring until end of volume rise.

5. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification.

5.1 STORAGE STABILITY

(from date of receipt at FMC)

Min. 3 months at a temperature between +18 °C and +25 °C. The material shall be stored in air tight containers.