

## 1. PRODUCT DESCRIPTION

EKOPROFLEX A15-46 CR5 is a two-component polyurethane system designed for the production of flame-retardant high resilience (HR) moulded foams. It is mainly designed for the furniture sector.

|                               |                            |
|-------------------------------|----------------------------|
| POLY COMPONENT (polyol blend) | EKOPROFLEX A15-46 CR5 POLY |
| ISO COMPONENT (isocyanate)    | ISO KOMPONENT FX24260      |

## 2. APPLICATION

EKOPROFLEX A15-46 CR5 is used for the production of flame-retardant high resilience (HR) foams. The main application of EKOPROFLEX A15-46 CR5 is in the furniture industry.

## 3. COMPONENT CHARACTERISTICS

POLY COMPONENT - a formulated polyol mixture together with pink milk coloured additives.

ISO COMPONENT – a mixture of monomeric isomers of diphenylmethane diisocyanate (MDI), polymeric MDI and MDI-based prepolymer. Dark brown liquid without suspensions.

| Parameter | POLY             | ISO              | Unit  |
|-----------|------------------|------------------|-------|
|           | Measured at 20°C | Measured at 25°C |       |
| Density   | 1,10 ± 0,03      | 1,17 ± 0,02      | g/cm³ |
| Viscosity | 3000 ± 1000      | 350 ± 150        | mPa·s |

## 4. FOAMING CHARACTERISTICS UNDER LABORATORY CONDITIONS

Reaction times and apparent density of the core were measured under laboratory conditions (at 20°C) with hand foaming in a laboratory vessel - stirrer about 1200 rpm.

| Parameter                          | Value    | Unit  |
|------------------------------------|----------|-------|
| Weight ratio of POLY:ISO component | 100 : 48 |       |
| Start time                         | 18 ± 5   | s     |
| Gel time                           | 90 ± 20  | s     |
| Free rise density                  | 50 ± 2   | kg/m³ |

## 5. RECOMMENDED PROCESSING CONDITIONS

EKOPROFLEX A15-46 CR5 can be processed using low-pressure or high-pressure foaming machines.

| Volume ratio of POLY:ISO components | 100 : (45-55) |      |
|-------------------------------------|---------------|------|
| Parameter                           | Value         | Unit |
| Raw material temperature            | 20 - 25       | °C   |
| Ambient temperature                 | 15 - 25       | °C   |
| Cladding/mould temperature          | ~40           | °C   |
| Demoulding time                     | 5-8           | min. |

The method of mixing and pouring the system should ensure that the element is evenly filled with foam.

The demoulding time depends on the size of the mould, the mould temperature and the temperature of the POLY and ISO components. The mould surface should be coated with a release agent before use. The foam acquires its full mechanical properties after 24 h of seasoning. Before working with EKOPROFLEX A15-46 CR5, read the Safety Data Sheets of both components.

**Important: The entire contents of the Ekoproflex A15-46 CR5 POLY component package must be thoroughly mixed for 15 minutes before use. The component requires continuous stirring in the working tank of the foam spraying machine.**

## 6. FOAM PROPERTIES

The following results were obtained for the finished insulation product obtained from EKOPROFLEX A15-46 CR5 by the in-mould pouring method.

| Parameter                               | Value      | Unit  | Standard              |
|-----------------------------------------|------------|-------|-----------------------|
| Apparent core density                   | 55 - 75    | kg/m³ | EN 1602               |
| Hardness                                | 6-8        | %     | ISO 2439              |
| Resilience                              | 50-55      | kPa   | EN ISO 8307           |
| Comfort factor                          | 3 - 5      | -     | EN ISO 2439           |
| Permanent deformation after compression | 2 - 3      | %     | EN ISO 1856/ Method A |
| Fire resistance                         | compatible | -     | BS 5852 (Crib 5)      |

## 7. PACKAGING

Metal drums with capacity 216 dm³, IBC container with capacity 1000 dm³.

## 8. RECOMMENDED STORAGE CONDITIONS

Both components of the system should be stored in tightly closed packaging in dry rooms at 15 - 25°C. Protect from moisture and direct sunlight. Shelf life of EKOPROFLEX A15-46 CR5 system in original closed producer's packaging stored in recommended conditions is **3 MONTHS**. After using part of the contents from the container, the remaining contents should be tightly closed and used quickly.

## 9. REGULATIONS

- Transport regulations applied in accordance with Section 14 of the Product Safety Data Sheet.
- EKOPROFLEX A15-46 CR5 does not contain ozone-depleting foaming agents in accordance with the European Union's regulations on the marketing and use of controlled substances - Regulation (EU) No. 2024/590 of 7 February 2024.

## 10. ADDITIONAL INFORMATION

The data contained in this technical information are based on the results of our laboratory tests and practical experience and do not constitute a guarantee of the properties of the final finished product. The results obtained may differ from those given if the product is used in conditions other than those assumed. We therefore recommend that you carry out your own tests to check the suitability of the product for a given application. The application of the foam and the conditions of its application are not controlled by the manufacturer, the responsibility for their correct selection rests with the contractor. Guidance on the use of the system is contained in the Technical Information (TDS) and Safety Data Sheets (SDS). Failure to comply with the conditions recommended by the manufacturer may adversely affect the foam application process and its performance.

**IMPORTANT:** We are happy to provide technical and material support for the implementation and use of the EKOPROFLEX A15-46 CR5 polyurethane system. At the same time, when necessary, we assist in the adjustment and selection of the relevant parameters. For all matters related to the purchase and use of EKOPROFLEX A15-46 CR5 polyurethane system, we encourage you to contact your technical and sales representative directly or by writing to [prodex@pcc.eu](mailto:prodex@pcc.eu).