# POLYMER GROUP LTD SOLUTIONS FOR EXTREME ENVIRONMENTS

#### **Product Data Sheet**

## **ENDURATHANE HP506M Flexible Hand-Mix Foam**

#### PRODUCT DESCRIPTION

**Endurathane HP506** is hand pour grade flexible foam comprising a polyol blend containing M1 Blowing Agent and is Ozone friendly. The Ozone Depletion Potential Value of this foam is 0.

**Endurathane HP506M** Polyol is used in combination with **Endurathane HP506M Part A (Type 7)** as a two component system to produce Integral Skin type flexible foam.

**Endurathane HP506M** may be pigmented with DINP dispersed pigments.

#### PROCESSING CONDITIONS

(Part B must be agitated prior to each use)

#### Mix Ratio by Weight

Endurathane HP506M Part B 100 Endurathane HP506M Part A (Type 7) 47

#### REACTIVITY PROFILE

Laboratory cup foam test conducted at 20°C using a mechanical stirrer.

 $\begin{array}{lll} \text{Mix Time} & 10 \text{ seconds} \\ \text{Cream Time} & 38 \pm 1 \text{ seconds} \\ \text{Gel Time} & 68 \pm 3 \text{ seconds} \\ \text{Tack Free Time} & 104 \pm 3 \text{ seconds} \\ \text{Free Rise Density} & 125 \pm 5 \text{ kg/m}^3 \\ \text{Appearance} & \text{light beige} \end{array}$ 

#### TYPICAL LIQUID PROPERTIES

AppearanceWhite liquidViscosity500-700 cPs @ 20°C

Specific Gravity 1.13 g/ml @ 20°C

#### RECOMMENDED USES

The system can be used for moulding chair armrests, other furniture components, automotive parts and for making props.



#### **PACKAGING**

15.5 Kit comprising Endurathane HP506M Part B 10.5kgs Endurathane HP506M Part A 5kgs



### HEALTH AND SAFETY ADVICE

Refer to Polymer Group Safety Data Sheets for individual products. Before using this polyurethane system please refer to the Material Safety Data Sheets for both Components for information on the hazards associated with their use and correct handling procedures.

**Component A [isocyanate]** is a modified isocyanate, based on 4,4-diphenylmethane diisocyanate (MDI). It is moderately toxic.

**Component B [polyol]** is a mild irritant.



#### **APPLICATION DATA**

**ENDURATHANE HP506M** Part B must be agitated prior to each use.

#### **Mould Materials**

**Endurathane HP506M** may be used with most common mould materials. Substrates must be clean and dry.

Ambient and surface temperatures should be above 15°C (moulds are usually run in the 30-40°C range). Low temperatures will decrease rise of foam markedly. Suitable release agents must be used.

#### **Theoretical Yield**

Always check yield and application rates. Adequate allowance must be made for overpacking, especially when cavities are narrow or foam has a long flow path.

1kg of foam occupies 0.007m³ (theoretical).

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All chemical materials should be used by trained personnel.

Component A (isocyanate) contains methylene bisphenyl diisocyanate (MDI). It is an irritant and allergic sensitiser. It is moderately toxic. Avoid Contact with skin or eyes, avoid breathing vapour and use only in well ventilated areas.

Component B (polyol) contains HFC, a volatile blowing agent. It is a mild irritant. In confined spaces it may displace sufficient air to be hazardous. Provide ventilation or use only in well ventilated situations.

Always wear eye protection and suitable protective clothing. Flush splashes to the skin or eyes with copious quantities of water.'

#### Clean up

Owing to the chemical resistance of polyurethane products it is important to clean up any surplus as quickly as possible. Methyl Proxitol is suitable for general cleaning and methylene chloride can be used as a line flush. Wear suitable protective clothing, goggles and gloves at all times when cleaning. Greasing components beforehand assists with contamination removal.

#### **Storage**

Store at temperatures between 15° and 26°C in tightly closed containers to prevent moisture and other contamination. If exposed to moisture Component A will crystallise resulting in line blockages.

Shelf Life Minimum 6 months.

Rev 1