

# SIPMOUSSE 30/70 FIRM

The resin SIPMOUSSE 30/70 FIRM is a ready to use non-filled polyols polyether mix, without CFC nor substitutes (HCFC or HFC). When mixed with the HARDENER MS, it allows the realization of a very expanded polyurethane foam, hard and flexible, very soft and thick, with a density of about 80 g/L.

The resin SIPMOUSSE 30/70 FIRM can be tinted with our coloring pastes for PU.

Finally, for a specific external finishing (smooth or grainy surface, stain-smooth or mat) or if water tightness is needed (the soft foams like this one have open cells and thus react like sponges), the foam can be coated with an ERGOPEAU finishing paint. This will bring a soft, resistant and waterproof skin that can be tinted.

**Applications in prosthetic and orthotic: injected foam cosmesis...**

## Implementation

The resin/hardener mixing ratio is 100/60.

The only expending agent is the CO<sub>2</sub> that is produced by the reaction between the isocyanate and the water.

This system can be implemented either manually (mixed with an adapted mixer at 2 000 or 3 000 rpm), or with Low Pressure or High Pressure machines.

After complete hardening, the foam can be easily worked on a router or with abrasive bands (coarse-grained preferably), and can be cut with bandsaw or blade saw, without tooth.

Its viscoelasticity has the «fast return» characteristic. Thanks to that, it is very resistant to the crushing and the sinking through the time.

## Reactivity

PARAMETERS	DURATION*
Expansion start time	≈ 35 sec
Expansion end time	≈ 3 min
Demoulding time	≈ 45 min
Full hardening time	≈ 24 h

(\*) measurements made at 20°C on 150 g of mixture



### Characteristics of the polymerized product

**Hardness Shore 00:** approx. 40

**Density g/L:** approx. 80

**Expansion:** x12

## Characteristics of the components

### SIPMOUSSE 30/70 FIRM:

- Chemical basis: polyols polyether mix
- Expansion agent: CO<sub>2</sub>
- Color: translucent, colorless
- Viscosity at 22°C: 1 500 to 2 000 mPa.s
- Density at 22°C: 1 030 to 1 050 g/L
- Filler: none.

### HARDENER MS:

- Description: 4,4' diphenylmethane diisocyanate based polyisocyanate (polymeric MDI)
- NCO rate (%): 24 to 25
- Density at 25°C: 1700 g/L
- Flash point: > to 200° C
- Viscosity at 25°C: 300 to 320 mPa.s
- Color: yellow-brown
- Sediments: < to 0.1%

## Storage and packaging

The products are guaranteed 18 months if they are stored between 15°C and 25°C in sealed drums in a dry place.

STORAGE	SIPMOUSSE 30/70 FIRM
Plastic drum, 2 kg	MST R02
Plastic drum, 5 kg	MST R05

  

STORAGE	HARDENER MS
Plastic drum, 2 kg	DMS 002
Plastic drum, 5 kg	DMS 005

## Customs' codes

SIPMOUSSE 30/70 FIRM	39072020
HARDENER MS	38249992