J-Foam 5216 A+B

Low Density Rigid PU Foam

1. DESCRIPTION

J-Foam 5216 A+B is a two part polyurethane foam system, when mixed together at the correct ratio, expands to form a low-density hard rigid foam.

2. ADVANTAGES

- General purpose.
- 50:50 mixing.
- Ideal for hand dispensing.
- CFC free.
- Maximum service temperature 70ºC.
- Water based system.

3. APPLICATIONS

Suited to the filling of voids or production of light weight firm rigid mouldings. Ideally used in the production of props and models.

4. CHARACTERISTICS

a) CONSTITUENTS:

	J-Foam 5216 Part A (Polyol)	**J-Foam 5216 Part B (Isocyanate)**
Appearance	Liquid	Liquid
Colour	Clear	Amber
Specific gravity /gcm^{-3} @ 20ºC	1.10	1.24
Viscosity /mPa @ 20ºC	400	350

b) MIXING:

Part A / w/w	**Part B / w/w**	**Cream Tim / Secs**	**Rise Time / Secs**	**Free Rise Density g/l (or Kg/m^3)**
50	50	40	180	42

Mix Ratio

J-Foam 5216 can be sued at 1:1 by weight. Whilst a slight variation from this ratio may be tolerated, it is important that the ratio is respected at all times. Any variation in ratio must first be tested by the user before production.

Excessive usage of isocyanate can cause hardening of foams over time and may even cause excessive contraction of the moulding.

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Preparation
For good release, J-Foam 5216 should be cast into either silicone rubber jacketed rigid mouldings, or a GRP rigid mould using J-Wax as a release agent (two coats). Using a hot air gun, warm the surface of the mould (without evaporating the release wax) and fasten the casing together.

How much foam?
The free rise density shows how far the foam will expand, albeit an estimation. First estimate the volume of your moulding by measuring length, base and height in cm. Multiply these together and divide by 1000 to obtain the volume in litres. Multiply this figure by the free rise density and this represents the minimum foam required. Increase this by 10—20% and do your first trial.

Method
Weigh out the required Part-A, then tare the balance and weight directly into the polyol the required amount of Part-B. Rapidly mix both parts (40 second cream time) and immediately pour into your waiting mould. Close the mould allowing only small air vents to prevent air pockets forming.

Demould after at least 10 minutes, once the foam is tack free and fully cured.

c) TYPICAL MOULDED PROPERTIES

Core Density/kg/m^3 [BS4370]	42
Closed Cell Content/% [ASTMS D-2856]	86
Compressive strength / KPa [BS4370]	165
Tensile Strength / KPa [BS4370]	275

5. PACKING

Available in 10kg kits only.

6. HEALTH & SAFETY

(Refer to Health & Safety Data Sheet)

Handling and mixing J-Foam 5216 A+B require the following precautions:

i. Use adequate ventilation and do not breathe vapour or spray.
ii. Wear gloves and goggles.
iii. Do not eat, drink or smoke.
iv. Avoid swallowing skin or eye contact.
v. If contact does occur, wash with clean water immediately and in the case of eye contact, consult a doctor.

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7. SHELF LIFE

J-Foam 5216 A + B has a minimum shelf life of six months when stored in the original containers at temperatures between 18ºC and 25ºC.

Note: IF allowed to freeze J-Foam 5216 A+B will be spoilt. J-Foam 5216 A+B is moisture sensitive. Keep containers in a dry place. Do not leave open to the air for long periods.