

EXPANDING FOAMS

Expanding Foams

Flints stocks four types of expanding foam to suit most purposes. Some foams purchased from builder's merchants are open cell foams which absorb water like a sponge. Our rigid foams are either closed cell or predominately closed cell with very low moisture absorption. The Single Component Foam is designed as a gap filler and is flame retardant. It can be used to glue large blocks of polystyrene where gap filling is needed. The Two-Part Pouring Foam can be poured into moulds. Froth-Pak has the advantage of being spray applied so it can be used to thicken up tree armatures, insulate steel containers or hulls, or provide stiffness to vacuum-formed panels. The Flex Foam remains soft and can be used for costume props. With all the foams read the instructions carefully and pay particular attention to the temperature of the material which may take time to warm through.

SINGLE-COMPONENT POLYURETHANE FOAM

Acoustic Fire Rated Straw Foam

A one-component moisture curing polyurethane foam which seals, fills, fixes, bonds and insulates most construction materials. Once cured it becomes a semi-rigid water-resistant rotproof foam which can be sawn, cut, moulded, painted or plastered over. It can be used to bond and fill blocks of polystyrene but it is not suitable on thin sheets. It is tack-free in 9 minutes and cuttable after one hour. Full foam setting time is 12 hours. Yields approximately 38 litres when freely expanded. The foam has been tested to flame retardancy using the general principles of BS 476:1987 Part 20 on specimens of floor and wall mounted linear gap sealing systems. A flame retardancy of 300 minutes was achieved for some gap dimensions with incorporation of a mineral fibre core. Completely water resistant. Pink colour. Acoustic rated to W=db59.



code	price
ADH057	£13.30

FLINTS RIGID POLYURETHANE FOAM

Flints Rigid Polyurethane Foam

Low density rigid 2 part foam used to cast lightweight props or fill voids to add structural integrity. Contains no ozone depleting CFC's or HCFC's. Simple mix ratio of 1:1 by weight. The 2 parts are best mixed together by using a paint mixing paddle attached to a drill. Hand mixing is also perfectly fine but it's worth pre-mixing part A to aerate it before mixing with part B. As soon as both parts have been fully mixed, it should be poured into your mould/cavity before any expansion has begun.



The foam can be "free risen" meaning the foam can rise if not restricted but for best results, especially if you are casting something with lots of detail, it's worth restricting the rise so that the foam expands into every crevice. For example, in the image we have a 1-part mould of a stage weight that we have laid a sheet of clear acrylic over to restrict how much the foam can expand. The acrylic has a predrilled hole as it's still important for the foam to have some way of venting.

Optimal temperature for mixing 2-part foam is 18-23°C, however cure times can vary a lot depending on ambient temperatures and amount of material mixed. As a rule, lower temperatures = slower curing, Higher temperatures = faster curing, small mixtures = slower curing, larger mixtures = faster curing. Top Tip: We have found that warming the mould with a heat gun (warm not scorching!) prior to pouring in the 2 part mixture really helps the foam to develop a smooth 'skin'.

SPECIFICATION: At 20°C, Cream Time: 25-35 seconds, (from mixing to start of rise), Rise Time: 180 - 230 seconds (start of mixing to end of rise). The foam should be tack free at around 6 minutes but best left a couple hours before demoulding. Free rise density of cured foam: 48 - 50 kg/M3



code	weight	price
PRORIGIDF2K	2kg	£39.85
PRORIGIDF10K	10kg	£119.50

SPRAY POLYURETHANE FOAM

Froth-Pak™

Froth-Pak is a two part spray applied polyurethane foam system, now HFC-free, which means that it does not contain ozone-depleting chemicals.

Being spray applied, the foam can be used where pouring foam would be uncontrollable. Flints are distributors of this excellent product and offer it at very competitive prices.

Froth-Pak is perfect as a sculpting medium for carving. Use it to quickly to create rock faces or spray it onto tree armatures. It will also add structural strength to your constructions. It can be used as an insulation material to cut condensation, reduce sound and hold heat. Ideal for insulation of steel hulls and cooling boxes.

Please spray a small test amount into an empty carton before getting started. It should be tack-free within 60 seconds, if not check gun is clear and working correctly, and tanks are sufficiently warm. Also take note of the colour, then while you're spraying keep a constant eye on it; if the spray lightens or darkens it could indicate a blockage in one of the tubes or nozzles. Do not continue to use as it may not set. Please note: Ruthlessly ensure temperature conditions are met. The tank contents must be at least 24°C. Do not use product if under this temperature as it will result in improper mixing of the chemicals. Ambient temperatures can be lower but the contents must be warm.

SPECIFICATIONS: Density: 28 kg/m³, Rise Time: 30 seconds, Froth-Pak 600 kit weight: 49.75 kg (ISO Tank: 25.25 kg, POL Tank: 23.5 kg, Gun Kit: 1kg) Foam Produced: 46 ft³ (1.3 m³), Froth-Pak 180 Kit weight: 11.9 kg, Foam Produced: 14 ft³ (0.4 m³) Reaction to Fire: EN 13501-1 (Class E), No harmful HCFCs or HFCs



code	description	price
PROFP180NK	Froth Pak 180 Kit c/w gun	£455.38
PROFP600NK	Froth Pak 600 Tanks ISO & Poly Kit	£845.00
PRO8010223	Froth Pak 600 ISO Tank A only	£367.85
PRO8010224	Froth Pak 600 POL Tank B only	£367.85
PRO8010240	Froth Pak GhA15 Gun Assembly	£129.95
PRO8010222	Froth Pak 180 Tank without gun	£359.00
PRO8010239	Froth Pak GH A9 Gun Assembly	£99.98
PRO8010243	Froth Pak Cone Nozzle	£2.54
PRO8010242	Froth Pak Fan Nozzle	£2.54

TWO-COMPONENT SOFT FOAM

Flints Soft Foam

Soft, pillowy, memory foam mattress-y, 2-part Polyurethane Foam for prop making. Formulated to be soft but also have a smooth skin for minimal finishing. Perfect for light weight soft forms on costume, gap filling, or prop weapons. If you are moulding something like a sword then you might want to try the Black Gun Foam as it is semi-flexible and would hold a form without drooping. However, this soft foam would make the perfect head of a hammer or anything that might make contact with another performer without causing injury.

SPECIFICATIONS: Mix Ratio: 2(A):1(B), Timings vary with 2 part foams depending on volume mixed and ambient temperatures, For best results use at 20 °C, Free Rise Density: 0.10 g/ml to 0.15 g/ml, Cream Time: 20 - 40 seconds, Rise Time: 3 - 6 minutes, Demould Time: 20 minutes, Full Cure: 12 hours

code	weight	price
PROSOFTFOAM3K	3kg	£49.85
PROSOFTFOAM15K	15kg	£214.85



NEW

Flints Black Gun Foam

Make your own prop stage weight! Two Part Polyurethane Semi - Flexible Foam known as 'Gun Foam' as, when curing, it develops a thick, semi-gloss, smooth skin that replicates the look and texture of weaponry & steel more generally. This means it requires little finishing, and the black pigment is dispersed throughout the foam so any damage wouldn't be immediately obvious.

In writing descriptions for this catalogue, I was curious to see what kind of job ChatGPT might do so I gave the main bullet points and added in "also add in some kind of joke around the prop stage weight, somehow referencing simulacra" And this is what it came up with:

"In the whimsical world of art theory, a black foam prop stage weight is the ultimate prankster in the game of simulacra. It struts around the stage, flexing its non-existent muscles, pretending to be as heavy as its steel counterpart. But alas, it's all smoke and mirrors or should we say foam and feathers? It's the embodiment of "fake it till you make it," a lightweight imposter in a world that values gravitas. Yet, in its deceptive lightness, it raises profound questions about reality and perception, making us wonder if anything is truly as it seems."

Clearly, Jack's out of a job....

SPECIFICATIONS: Mix ratio: (A)3:1(B), Timings vary with 2 part foams depending on volume mixed and ambient temperatures, For best results use at 20 °C, Cream Time: 15-25 seconds, Rise Time: 2-3 minutes, Demould: 20 minutes, Full cure: 12 hours, Free rise density: 0.15 g/ml - 0.025g/ml

code	weight	price
PROGUNBLK4K	4kg	£65.00



NEW

FlexFoam-iT! X

A two-part soft foam with a very fine cell structure ideally suited for soft costume props. Simply mix part A and part B in equal quantities by volume and pour into the lowest point in your mould. The mould should have been treated with a nonsilicone Release Agent [page 142]. It will expand to approximately 6 times the original volume and is tack-free in 30 minutes. Demould in 2 hours. Pot life is 50 seconds. Supplied complete with full instructions.

code	weight	list price
PR0800	880g	£26.25
PR0801	7.08kg	£166.98

