

Information for retailers

Frequently asked questions

What is the purpose of the cage?

The main purpose is to mitigate the effects that fireworks would cause if there was a fire at your store. Larger fireworks that are classified as 1.3G pose a greater hazard than 1.4G ones, hence they have a Hazard Type (HT) designation of HT3; in this form it reduces the amount that you can safely store. In simple terms, fireworks that are HT3 can, when correctly stored in these cages, can be deemed to be HT4, and can be treated in exactly the same way as any other HT4 item.

How heavy is this cage?

The assembled cage weighs approximately 150kg. It is made from welded galvanised steel.

How big is the cage?

When assembled the cage measures 1000mm x 1200mm x 1200mm.

Is it on wheels?

No. When empty it is fairly easy to manhandle if basic safety precautions are taken.

Do I buy the cage or is it on lease/hire?

Normally the cage is an out-right purchase, it is yours to keep. There is no harm in asking your supplier if they would consider a rental program for you.

Is the access door on the top of the cage?

Yes, access is through the door on the top of the assembled cage.



What can I store in the cage?

You can only store fireworks that are at, or below, the criteria that was applied to the cage during testing. The criteria are determined by the Net Explosive Content (NEC) of a tube or rocket, the Flash Powder content of any tube or rocket and the internal diameter of any tube in a shot-tube/roman candle type of product. If ANY item within the cage exceeds the criteria then the whole contents will be treated as the most hazardous item in there and you may well be in breach of your storage licence; more importantly you will be putting yourselves in greater danger.

What are the limits?

The limits are clear and absolute. **Only items that have been identified by your supplier** can be mitigated in the Pyropack and you must ensure that the following limits are adhered to.

- Where there are just the identified barrages in the cage then you must ensure that the total NEC does not exceed 60kg
- Where there are only the identified rockets in the cage then you must ensure that the total NEC does not exceed 30kg, and the FLASH NEC does not exceed 1.7kg.
- Where there is a mixture of Barrages and Rockets then the cage maximum NEC is reduced to 45kg. Of this no more than 30kg NEC can be from the rockets and the rocket FLASH NEC must remain below 1.7kg.

How do I know my items meet the requirements?

You don't: You will need to get this information from your supplier. Do not try to self-assess or guess a product's pyrotechnic composition.

AF Pyro Ltd and Bright Star Fireworks will give you clear information on their products and will state if a particular firework can or cannot be safely stored in the Pyropack 3067.



I have a similar cage but no Declaration of Conformity; can I apply the same rules?

No, most certainly not. A cage without a valid (matching holographic stamped) Declaration of Conformity offers no mitigation and you will most likely be in breach of the terms of your Storage Licence.

Do I still need a Storage Licence?

You must still comply with the Explosive Regulations 2014. If the amount of stock you hold is more than 5kg HT4 then a licence is required.

Do I need to tell the Local Authorities that I will be stocking HT3 items in my store but in the cage?

It is always worth being clear with the Local authority inspectors, they are familiar with the limits on these cages and most will be able to give you good advice. Just to clarify, qualifying items are only HT4 when they are stored in the cage and within the stipulated NEC limits. When you apply for a Storage Licence it is in your interest to seek one that covers the maximum quantity and type that your store is capable of holding.

My Local Authority say I cannot use this cage as the items revert to HT3 when I take them out to make a sale, is this correct? No, this issue has been resolved. Although they are technically correct it does not prevent you from making a sale. Your Risk Assessment should have a section covering how you conduct this process safely. It has been clarified with the Health and Safety Executive and detailed below:

"Mitigation in the Pyropack is effective when the access door is closed and securely fastened, therefore apart from loading and unloading the access door must be closed and securely fastened using the locking mechanisms provided."



Do the items need to be kept inside their UN cartons whilst in the cage?

YES. Items must be stored within the Pyropack inside closed UN Cartons.

Am I limited to just one cage?

No, you can have as many as you want provided you do not exceed the terms of your Storage Licence and that individual Pyropack limits are not exceeded.

If I have any further questions, who do I ask?

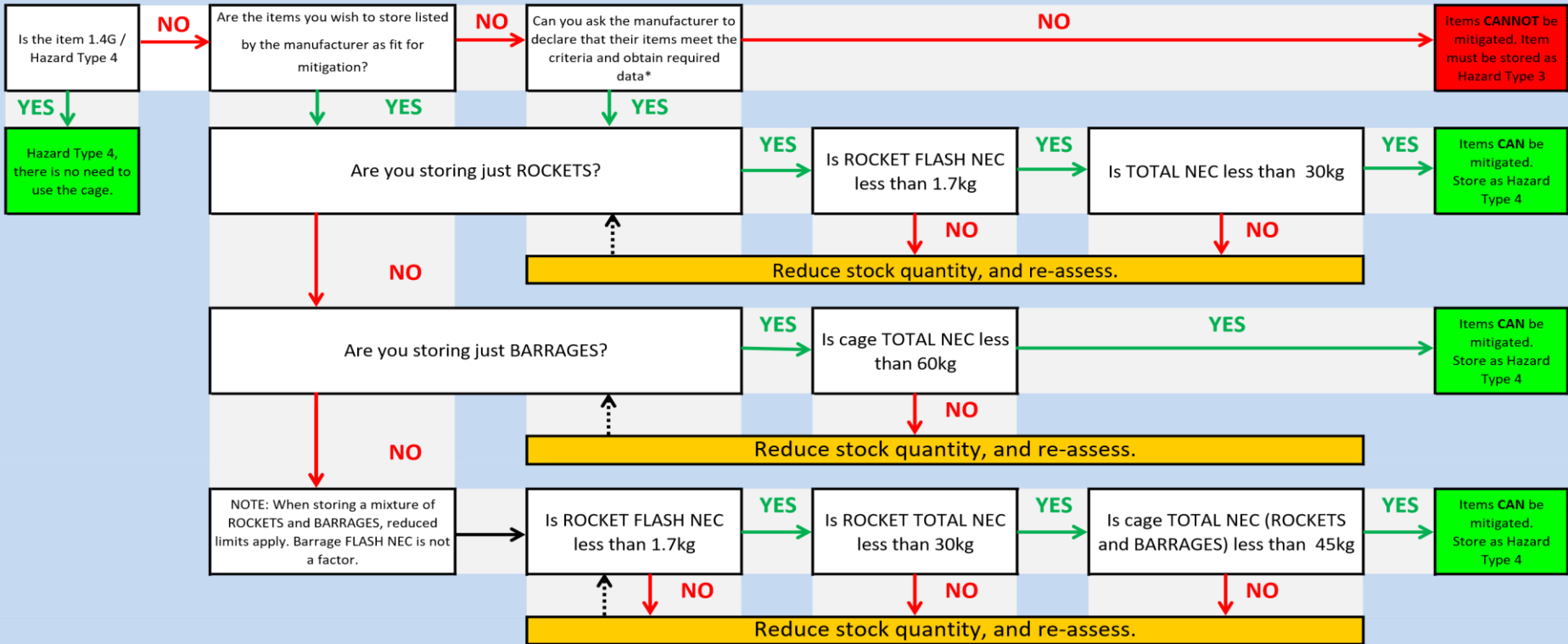
If you have any questions about the Pyropack then please contact either AF Pyro Limited, or Bright Star Fireworks

Bright Star Fireworks UK Ltd : 01765 640740



Annex A to
 Pyro Cage Assembly Instructions
 Ver 3.5 dated 3 April 2023

*To determine if a product can be mitigated if not already listed then you will need a declaration from the manufacturer that it meets the criteria. You will also need the item's NEC and, for rockets, the Rocket Flash NEC.

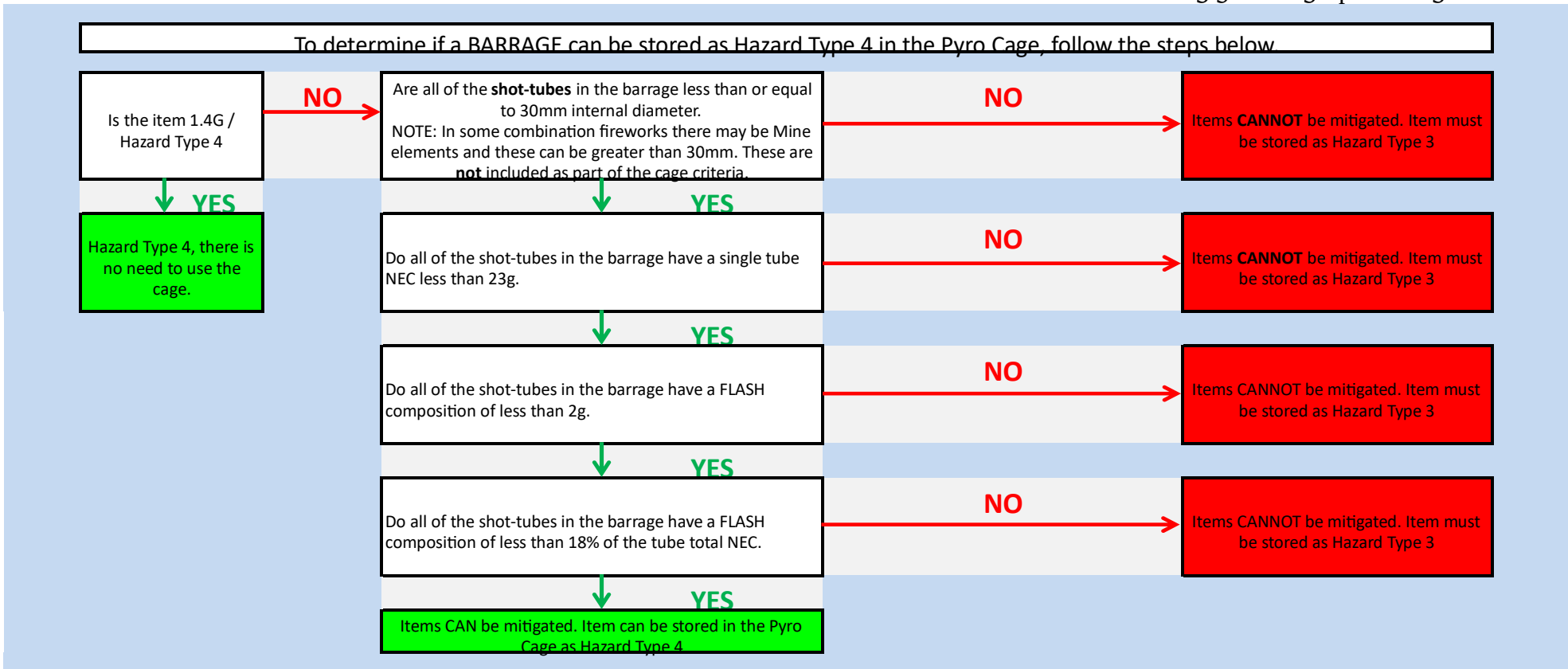


Annex A to
Pyro Cage Assembly Instructions Ver 3.5
dated 3 April 2023



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Pyropack MC100K and mitigation of other suppliers' fireworks.

It has come to our attention that other companies are stating that our pyro cage can be used to mitigate the full range of their products. Just to be clear and for the avoidance of any doubt it is up to them to provide you with a written statement that the product they are supplying does in fact meet the criteria for storage mitigation and they MUST provide you with the item's Net Explosive content, tube diameter, flash content/flash percentage.

By doing this you have the correct information to ensure you do not overstock the cage and fall in breach of the terms of the storage licence you hold. It will be you that gets prosecuted, not them.

Their product MUST meet the criteria laid down in our declaration of conformity.

- Barrages MUST be less than or equal to 30mm tube diameter
- Individual tubes MUST NOT exceed 23g NEC
- Individual tube MUST NOT exceed 2g FLASH NEC or 18% NEC whichever limit is reached first. -
- Rockets of NEC 0g-40g per rocket, the FLASH NEC must be less than or equal to 25% NEC -
- Rockets of NEC 40.1g-125g per rocket, the FLASH NEC must be less 10.6g.
- Rockets of NEC 125.1g-137g per rocket, the FLASH NEC must be less 9.6g.
- Rockets of NEC 137.1g-149g per rocket, the FLASH NEC must be less 8.6g.
- Rockets of NEC 149.1g-161g per rocket, the FLASH NEC must be less 7.6g.
- Rockets of NEC 161.1g-173g per rocket, the FLASH NEC must be less 6.6g.
- Rockets of NEC 173.1g-185g per rocket, the FLASH NEC must be less 5.6g.
- Rockets of NEC 185.1g or greater CANNOT be mitigated.

The PyroPack can only be deemed to mitigate the above qualifying product if:

- The total NEC for barrages only is less than 60kg.
- The total NEC for rockets only is less than 30kg AND the FLASH NEC is below 1.7kg -The total NEC for rockets and barrages in the same cage is less than 45kg where the total for the rockets is below 30kg AND the FLASH NEC is below 1.7kg

It is YOUR responsibility to remain within these limits.

You therefore need a signed declaration from the supplier stating that their product as they have listed on your order meets the requirements. They will need to provide you with ALL of the information required above so that you can be confident in having safe storage. A simple statement saying that a product is safe IS NOT GOOD ENOUGH. If they cannot provide this information then DO NOT trust what is said. It is YOU, as the licence holder, who will be prosecuted. it is YOU who will have to declare this on all future firework licence applications, and it is YOU who may lose the ability to obtain a storage licence in the future.

If you have any questions please give me a call.

Kind regards

Steve 01765 640 740



Supplementary Information on *Bright Star products: The following Hazard Type 3 (1.3G) items can be stored in the Pyropack and their Hazard Type mitigated to Hazard Type 4.

Item Number	Description	Carton NEC(kg)	Carton Flash NEC(kg)
2311	Airhawk	1.80	0.15
2315	Warhawk	3.60	0.30
2361	Flying Pigs	2.04	0.16
2365	Sonic Sidewinder	2.54	0.08
2368	Silly Cow	1.98	0.18
2399	Quantum Break	2.66	0.28
2400	Warhawk 2	3.36	0.24
2402	Spooky Spirits	2.16	0.18
3105	Black Saturn	3.00	0.30
3106	Black Saturn 2	3.00	0.30
2419	Juggernaut	3.07	n/a
2423	Pandora's Box	3.46	n/a
2424	Voodoo	0.95	n/a
2429	Apocalypse	1.49	n/a
2430	Sorcerer's Shadow	1.62	n/a
2435	Crackdown	0.98	n/a
2356	Thunder Strike	2.88	n/a

*There may be other item that can be mitigated in these cages but these are variants of the above.
Speak to your supplier if you need more information.



Supplementary Information on *CUBE products:
The following Hazard Type 3 (1.3G) items can be stored in the Pyropack and their Hazard Type mitigated to Hazard Type 4.

Item Number	Description	Carton NEC(kg)	Carton Flash NEC(kg)
329	ZEUS	2.205	N/A
330	APOLLO	2.933	N/A
331	ATHENA	1.396	N/A
331	POSEIDON	1.832	N/A
3001	RAGING BULL	2.910	N/A
3002	UNTAMED WARRIOR	1.369	N/A
3003	FURIOUS	2.400	N/A
3004	GALAXY DEFENDER	1.992	N/A
3006	GORILLA	1.920	N/A
3007	MERCENARY	2.976	N/A
3009	BOSS NASTY	2.704	N/A
3011	NIGHT REAPER	2.762	N/A
3012	LEGION	1.000	N/A
3016	GHROME	1.980	N/A
3017	HELL RAISER	1.996	N/A
3018	BEACH BANGERS	1.924	N/A
2001	SUPER WHIRL	2.820	0.14
2002	TRAIL MAKER	3.169	0.21
2003	UNIVERSAL	4.247	0.31
2004	AMAZING	5.779	0.40
2005	FABULOUS	3.922	0.27
2007	HAWK SLAYER	2.520	0.20

*There may be other item that can be mitigated in these cages but these are variants of the above. Speak to your supplier if you need more information.

