

Guidance for Health and Safety within Fire Activities

Written by Amy Holmes for LUMACS 2025
aholmesd20@gmail.com

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It is worth noting that this document serves only as a guide to activities, and is tailored to work for Lancaster University Magic and Circus Society.

1 General Regulations

Before hosting any fire-related activities within the society, the Health and Safety Officer must be aware and approve of the proposed plan, as they will be in charge of all handling of paraffin, and the maintenance of the fire equipment.

The exec committee must evaluate the site of the activities, and ensure it is suitable and safe. A risk assessment must be completed relating to the specific site and nature of the activities before they take place. Before the fire session, the Health and Safety Regulatory body must be briefed on procedures relating to any possible incidents, including the location of water taps, water-soaked towels, and fire extinguishers.

Ensure all paraffin used is within its expiry date, and hasn't been stored for more than five years in its current container. Paraffin must be stored upright, away from sources of ignition, and the local firefighters **must** be made aware of the location and volume of stored flammables if the volume exceeds 20 litres (check local guidance, the limit may vary). Ensure that no participating member of the activity has consumed alcohol, and is wearing suitable clothing (must have a cotton content of over 80% to prevent the melting of plastic within the clothes onto skin, this includes all hems and cuffs. The higher the natural content the better). Within all fire spins, a performer must **never** be left alone, when using lit equipment, always ensure there is a responsible party to supervise.

On the day of the activity, the site must be rechecked, and the weather conditions evaluated. A suitable area must be cornered off at the start of the session to allow a safe space for the fire spinning to take place, with a suitable area for the paraffin soaking station.

If members of the public will be in attendance, be sure to mark out suitable safe spaces for them to watch from, and ensure there are a suitable number of Exec members to supervise activities and guests. Ensure that there are signposts to the nearest First Aid station, or ensure the Health and Safety Officer is readily available and identifiable at all times.

2 Equipment Maintenance

Fire props should always be stored in a well-ventilated area, away from sources of ignition. After first use, the wicks remain highly flammable, and should be treated with care. Between uses the wicks should be covered securely with covers such as socks. Props should be checked before **every** use, ensuring that there are no loose threads or unstable connections. All aspects of the equipment must be securely fastened (links on poi ect), and the prop **must** be taken out of commission for further inspection if there is any doubt of its safety.

3 Set-up and Stations

Within fire activities, the chosen fuel within the society is Paraffin, and this document details the health and safety precautions of Bartoline Premium Paraffin. Petrol, Diesel, or Gasoline should

never be used as fuel due to their low flash points, exceptionally high burning temperatures, and tendency to explode. It is worth noting that fuel will damage silicone, so caution is advised with certain props.

For every fire-related activity, there must be a paraffin soaking station. Within this area, a trained and signed-off member of the society must be constantly present to supervise the paraffin. The duties of this person include soaking the wick of equipment prior to performances, and ensuring the paraffin does not spill and is used properly. **The Paraffin must always be under constant supervision when it is not in the designated fire safe.**

4 Signing off Members as Safe

In order to sign off a member of the society as safe with fire, they **must** be able to demonstrate (with dry equipment) every move/trick they intend to practice with lit equipment to **both** the Health and Safety Officer and a member that has had **extensive** experience with the specific lit prop. The new member must stick to the pre-determined set of tricks during fire spins and may get additional moves cleared by the authorities defined above. Any member that intends to use lit props must also be over the age of 18 unless in exceptional circumstances.

It is required that all "competent members" must have been signed off by either previous situations defined by this section, and have extensive experience outside of the society, or were signed off at a convention or similar event by a competent individual. The decision on which members qualify for this role is to the discretion of the executive body (outlined in the constitution), as no official qualifications are expected.

When signing off members for Station and Set-up responsibilities, the Acting Health and Safety Officer **must** be present and agree with the member's competency.

5 Paraffin first aid measures:

General Information	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS CALL A DOCTOR OR THE NHS 111 SERVICE. Treat symptomatically.
Inhalation	Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately! Provide rest, warmth and fresh air.
Skin contact	Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue to rinse. Get medical attention if irritation persists after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves.
Notes for the doctor	The most severe risk is through ingestion, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours). Treat symptomatically.

Table 1: Paraffin First Aid Measures for Bartoline brand Paraffin

6 Firefighting Measures

6.1 Extinguishing Media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder, or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

6.2 Special hazards arising from the substance or mixture

The product is flammable. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up. Fire-water run-off in sewers may create fire or explosion hazard.

Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentrations.

6.3 Advice for firefighters

Protective actions:

Avoid breathing fire vapours. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control. Containers close to fire should be removed or cooled with water.

Special protective equipment:

In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6.4 Accidental Spillage Measures (Paraffin)

Evacuate area. Keep unnecessary and unprotected personnel away from the spillage. No smoking, sparks, flames or other sources of ignition near spillage. Do not touch or walk into spilled material. Do not enter storage areas or confined spaces unless adequately ventilated. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Take precautionary measures against static discharges. Take care as floors and other surfaces may become slippery. Do not handle broken packages without protective equipment.

Following any paraffin related incident, any soaked clothes must be removed and washed as soon as possible, and the affected person must not smoke or light any fires until the risk of combustion has been removed. A member of the executive committee must make the affected persons aware of this guidance as soon as the incident has been resolved.

For more information relating to the precautions or responses to paraffin, please see the Bartoline Safety Data Sheet.

The emergency telephone for paraffin related incidents is **01482 678710** (8.30am - 4.45pm Monday to Friday) or NHS 111 (General Public) (24 Hour service) If the paraffin is ingested, DO NOT INDUCE VOMITING, and please call this number: National Poisons Information Service (24hours) **0844 892 0111**

This document must be available to all participating members of fire activities.

This information was collected by Amy Holmes in 2025 for Lancaster University Magic and Circus Society. Although this document outlines all Society guidance, it may not be an appropriate guideline for all external organisations, and it is recommended that individual research is undertaken prior to fire activities. Useful information can be found at <https://www.firetoys.co.uk/blogs/fire/fire-safety-for-fire-spinners>.

LUMACS holds no responsibility for incidents that may occur when using the guidance that this document presents. For questions or comments feel free to email me at aholmesd20@gmail.com