

Beware The Lead In Leadlighting

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The information in this fact sheet is intended as a guide only. No guarantee is implied that by following the suggestions contained herein, raised lead levels may not occur.

Leadlighting and Stained Glass as a home hobby entails some significant risks of heavy metal poisoning by lead and other substances. These are greatest when the hobby is carried out within the living space and particularly in the presence of infants, toddlers and pregnant women.

THE DANGERS

- Lead Calme strips are 99% pure lead.
- Solder contains 40%-60% lead.
- Cementing materials contain lead which is present in both wet and dry states.
- Lead patina and polishing pastes contain lead.
- Abrasive compounds bind the lead and carry it in dust form.
- Solder fluxes contain acids which are particularly dangerous if inhaled.
- Glass paints and stains contain heavy metals such as Lead, Cadmium and Selenium.



These materials present dangers if not properly handled. The greatest risks are from the passage of lead to the mouth or breathing it in when it is hot or in a dust form. Here are some suggestions on what to do and more importantly, what not to do.

HOW TO MINIMISE THE RISKS OF CONTAMINATION

- Do not do your leadlighting in the home eg: the sunroom table or the spare room. Use a dedicated space outside the living area eg: garage, garden shed, ideally locked. Keep all your materials out of reach of children, in covered containers.
- Wear dedicated protective clothing and old shoes which you leave in the workspace, particularly if it is dusty. Cotton gloves are a good idea when handling lead.
- Never eat or smoke in the work area or until you have thoroughly washed your hands with an industrial strength hand cleanser and dried them on a dedicated towel.
- When soldering, set up a draught which will blow the fumes away from you and draw fresh air from behind. Ideally, if doing a lot of soldering, install an extractor fan. Portable, desktop units are available. Gloves and a mask are advisable.
- Cementing, cleaning and polishing should be done in a "dirty" area. The same ventilation arrangements apply as for soldering. If these are impossible, do the job outside, *in a dedicated containment area permanently fenced to keep out children and pets. Wear gloves and a (HEPA Filter) dust respirator. Wash down all residue when finished.
- When restoring old leadlights, soak them first to minimise dust when the panels are dismantled. Wear gloves and a mask or work outside*.
- Completed leadlight panels should not be touched, especially when freshly polished with blackening paste or when old and crumbling. Furniture should be arranged so that toddlers are unable to put their fingers or faces against the lead calmes.
- Clean your workspace regularly with water. Do not vacuum as this only spreads the contaminated dust more effectively. Clean the handles of your tools. Try to keep the work space as neat and tidy as possible. Cover shelves and close cupboards. Leave the fewest possible open spaces which can gather dust.
- Paints and stains should be mixed under an extractor unit until completely wet. Residue should be washed away. Contaminated rags should be separately washed, as with protective clothing, in liquid sugar soap. The washing machine should then be washed out with the sugar soap and spun before use for other clothes.
- It is recommended that pregnant women, breastfeeding mothers and the parents of toddlers postpone the practice of this hobby.

Remember: You respect the glass because it is sharp and can cut you. Lead is soft and blunt, but it can kill you.