Glue Waste Disposal

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Glue Waste - General

- This is becoming an increasingly important part of a remanufacturing operation.
- Cannot just “dump” glue waste
- Try to reduce the amount generated by good housekeeping practices, avoiding spillages etc.
- If possible use in-line mixing to reduce waste.
- In the future separate application techniques will be more common and this will allow the use of “washless” systems.
- If using different glue types segregate the glue waste.
- Treat empty glue containers as if they were full for disposal, e.g., PRF drums will still be classed as hazardous when empty, PUR and MDI are not.
- Ensure disposable “bags” or liners are disposed off appropriately.
Glue Waste - General

• Most adhesives are water soluble so they can be cleaned with water.
• Try to minimize the amount of water used.
• Use a water blaster to reduce the amount of water.
• Do not allow glue waste to be put down the drain directly unless it is contained and/or treated.
• Wash water can be put into settling ponds and allow the suspended solids to settle.
• Wash water can be evaporated.
• Glue and waste has a high BOD/COD so will need to have the solids separated and then either dumped in an approved landfill or combusted.
• Allow gluemix to solidify and then dump or crush and burn the solid.

Glue Waste - General

• If gelled resin is to be dumped leachate tests need to be performed.
• Once fully cured the hazards are reduced significantly.
• The gelled resin can be burnt but needs to be at above 750C for complete combustion.
• Check with local authorities on air emissions'.
• Wash water can also be put onto sawdust and then burnt.
• Investigate the use of returnable containers
• IBC's or Schutz tanks are very good options.
• Ensure that if these are used after they have had resin or hardener in them they cannot be used for Potable water.
API / EPI waste water

- Uncured adhesive mixture is easily cleaned with water at 50-60°C
- Easy handling of wash water with flocculation and filtration equipment.
- Cured resin can be delivered to local landfill
- Flocculated resin can be delivered to local landfill
- Treated water can be sent to the public treatment plant
- The MDI in the EPI will be fully cured after a period in contact with water as it reacts with water.
- There will be no free Isocyanate in the liquid part of the wash water.
- Be aware of CO2 formation in sealed drums of hardener and PUR.

PF / PRF waste water

- Can chemically treat wash water
- Need to add a catalyst, flocculent and hydrogen peroxide.
- Reduces phenol, resorcinol and formaldehyde to safe acceptable levels.
- COD can be reduced by 90%.
- Only suitable for small operations.
- Batch process.
Always consult with your adhesive supplier and local authorities on disposal options!