

Clean Up and Neutralise Acid and Base Chemical Spills

Some Acids and Bases (Alkali) can be cleaned up safer by neutralising the spill rather than using just polypropylene chemical pads which still give off the vapours and are more expensive to dispose. **ALWAYS CHECK** however with the acid or base SDS information for any incompatibilities and spill clean up recommendations.

Prepare for response - As with all chemical spills - secure the area, evacuate and ventilate fumes if required. Raise the alarm, use appropriate PPE as per the chemical SDS recommendations. Fully identify the chemical - ACID or BASE and implement the correct actions. Stop the spill (if safe to do) and ensure all safety measures.

Contain the spill - the appropriate Neutralising powders are all that is needed to respond. **NOTE:** When applied to the chemical, the mixture will react and bubble and fizz, giving off heat and gasses as the neutralisation process takes place. Adding an inert, fine mineral absorbent particle such as Perlite or Diatomite to the neutraliser will help suppress the reaction. For safety, ensure all precautions and PPE are in place during this application.

- **Acid Spills** - pour a mound of SODA ASH (sodium carbonate /bi-carbonate) or equivalent pH level base powder around the spill to stop any spreading. Broom the powder from around the perimeter, adding more if required for the volume, over the acid and allow the neutralisation to complete.

CAUTION: DO NOT over-neutralise by adding too much powder. Spill mixture requires TESTING with a suitable pH Test strip (or “Uni-Safe” pH Indicator Polymer) A neutral pH value of 7 is required for easy and safe disposal. Spraying water over the mixture can also assist with neutralising.

- **Base Spills** - use CITRIC ACID powder or equivalent pH level acid powder as the neutralising agent. Follow the procedure above in application, to surround and convert the base into a neutral pH 7 mixture.

Clean-Up - Proceed to mechanically scooping the spill mixture up with a flat shovel (a plastic shovel will prevent sparks) and a dustpan and brush ready for disposal. Check all surfaces/equipment and normalise to remove all chemical impacts.

Disposal - All contaminated materials should then be placed in appropriately sealed and marked/labelled drums or containers. Dispose through a licenced waste disposal contractor following all Local regulations. Costs however should be lower as the ACID or BASE should be a neutral nonhazardous material if pH is a value of 7.