



MERCURY DISPLACEMENT INDUSTRIES, INC.

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Mercury Clean-up Instructions

Because of the attraction that mercury has for gold (and to a lesser extent, silver), rings, watches, pens and other items made from or plated with gold or silver should be removed before starting clean-up. Wearing safety glasses is recommended. After removing power to the relay and taking appropriate precautions to avoid electrical shock, use disposable gloves to remove the relay and transfer it to the sealable plastic disposal container. The mercury can often be consolidated and picked-up using thin cardboard or plastic. Care should be taken to avoid spilling mercury on the floor and to avoid tracking mercury on the floor to other areas. Mercury pickup is often easier if the mercury is first sprayed with water. The water slows the evaporation of the mercury and reduces the tendency of the mercury to roll and spread. On flat surfaces, mercury (and water) can be centralized for pickup using a squeegee. If a shop vac is used, the exhaust should be vented outside and the unit considered contaminated and reserved for mercury pick-up. A small amount of water in the bottom will help reduce the mercury vapors exhausted. Special mercury recovery vacuums that filter out the mercury vapors are also available, but expensive.

When crude mercury pickup is complete, use the treated sponge in the mercury clean-up kit to absorb the small droplets of mercury that remain. Dampen the sponge with water and rub the area you want clean. As mercury is picked up it will react (amalgamate) with the material in the surface of the sponge and turn it silvery color. The amalgamated mercury in the sponge will help it pick-up mercury better, so you want to work from edges of the used areas of the sponge.

As an intermediate step to clean-up, the evaporation of mercury can be reduced by covering it with calcium polysulfide or flowers of sulfur. Another way of amalgamating the mercury for better pick-up is with a paste of zinc powder and dilute (5-10%) sulfuric acid. This should be worked into the surface to be cleaned and then swept up after it has dried. Residue should wash away with soap and water.

All clean-up items containing mercury (sponge, gloves sweeper contents ...) should be put in a sealable plastic disposal container with the relay and returned to MDI or otherwise disposed of properly. After clean-up is complete, wash with soap and water.

While mercury vapors are hazardous and precautions should be taken to minimize breathing them, mercury does not evaporate rapidly. Hazardous concentrations usually take a few hours to build up. You may want to use a fan to disperse the vapors. Avoid excessive heat since mercury vaporizes much more readily when warm. Do not smoke during the cleanup process or use cigarettes that may have mercury on them, since mercury contaminated cigarettes can produce unusually high mercury vapor levels in their smoke.

Shipping information:

Address:

Classification UN2809
Hazard Class 8 (Corrosive)
Packing Group III
Reportable Quantity 1-Pound

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Contactors - Relays - Switches

<http://www.mdious.com>