



ARIZONA INSTRUMENT LLC

JEROME[®]
MERCURY SPILL KIT
USER'S MANUAL

March 2012

ARIZONA INSTRUMENT LLC

3375 N Delaware Street | Chandler, AZ 85225 USA
800.528.7411 | 602.470.1414 | f 602.281.1745

www.azic.com

Email:

General – azi@azic.com

International – intl@azic.com

Customer Service – support@azic.com

PROPRIETARY RIGHTS NOTICE

This manual contains valuable information and material developed by Arizona Instrument LLC for use with the Jerome[®] Mercury Spill Kit. No part of this manual can be reproduced or transmitted in any form or by any means, electronic, mechanical or otherwise. This includes photocopying and recording or in connection with any information storage or retrieval system without the express written permission of Arizona Instrument LLC.

ALL RIGHTS RESERVED

ARIZONA INSTRUMENT LLC
3375 N Delaware St | Chandler, AZ 85225
800.528.7411 | sales@azic.com | www.azic.com
MADE IN THE USA

AZI P/N 700-0125-C
Last update March 2012

Mercury Spill Kit Contents

AZI Part Number	Description	Quantity
Y990-0234	Mercury Spill Kit	1
650-0003	Half Mask Respirator	1
650-0004	Respirator Cartridge	1 pack of two
<i>** refer to the color coded indicator on the cartridges to verify they are still usable</i>		
650-0005	Nitrile Rubber Gloves	2 pair
650-0006	Safety Glasses	1 pair
650-0007	Flashlight	1
650-0008	Mercury Absorbent, 500g	1 bottle
650-0009	Hg Absorb Jar	2
650-0010	Mercon Wipes	1 canister
<i>** refer to the date code on the bottle to ensure the wipes are within their 3-year shelf life</i>		
650-0011	Shoe Covers	2 pair
650-0012	Scoop & Scraper Set	1
650-0013	Liquid Aspirator	1
650-0015	Spray Bottle	1
750-0020	Ziplock Bags, 10" x 12"	2
Optional:		
6100 0112	Mercury Recovery Vacuum	



Mercury Absorbent
Mercon Wipes

Respirator
Respirator Cartridges
Gloves (2 pair)

Hg Absorb Jar (2)
Scoop & Scraper
Liquid Aspirator
Ziplock Bags (2)

Safety Glasses
Flashlight
Shoe Covers (2 pair)
Spray Bottle

The AZI Mercury Spill Kit (AZI P/N: Y990-0234) is intended for use in conjunction with the Jerome[®] Mercury Vapor Analyzers.

The 0.025 mg/m^3 ($25 \mu\text{g/m}^3$) cleanup level listed in these instructions is a general ACGIH Threshold Limit Value guideline for mercury spills in commercial/industrial environments. If the mercury spill is in a residential environment or requires cleanup to levels below the 0.025 mg/m^3 level, use a cleanup guideline appropriate to your specific situation, application or standard operating procedure/company policy.

1. Upon being notified of a possible mercury spill, immediately go to the suspected spill area and ensure the area has been evacuated. Block any entryway into the spill area and restrict everyone from entering.
2. Locate the nearest mercury spill kit. (It may be helpful to have mercury spill kits available in several locations). Verify that the respirator cartridges are not exhausted by looking at the color coded indicator on the cartridges. Install them on the respirator if they are not already installed, and then put on the respirator. Put on the nitrile rubber gloves, safety glasses and shoe covers. Take the mercury spill kit and return to the spill site.
3. Using a Jerome[®] Mercury Vapor Analyzer with the probe in the intake, take air samples and record the readings for the spill report.
4. Turn off the facility air conditioning and heating systems in and around the spill area. Turn on any exhaust fans or fume hoods in the spill area to assist in exhausting any mercury vapor. Open any exterior doors or windows in the spill area that lead directly to outside air.
5. Install the included batteries in the flashlight, and use the flashlight to visually inspect the spilled mercury to evaluate the size and quantity of the spill. Mercury droplets tend to roll and scatter, so be sure to check an expanded area around the spill location, as well as under any objects in the vicinity. Decide on the clean-up procedure based on the size of the spill.
 - a. For a few small droplets, use the Mercon wipes, Hg Absorb Jar, or the mercury absorbent.
 - i. The Mercon wipes can be used to simply wipe up the mercury droplets.
 - ii. The Hg Absorb Jar contains a specially treated sponge that can be used to wipe up and absorb the droplets.
 - iii. The mercury absorbent should be poured on top of the spill, and then activated with water from the spray bottle in the spill kit. After activation, clean up the absorbent with the Mercon wipes, the sponge in the Hg Absorb Jar, or for large quantities of absorbent, use the scoop and scraper in the spill kit.
 - b. For a slightly larger spill, use the aspirated pump to pick up small droplets, and follow that with the Mercon wipes, Hg Absorb Jar or mercury absorbent as described above.

- c. For a spill of 1/2 cc or more or for spills in carpeted areas, use the mercury recovery vacuum. The vacuum has already been assembled and is ready for use. The vacuum can be used to reclaim any amount of spilled mercury. If a mercury recovery vacuum is not available, contact AZI at 800-528-7411 or 602-470-1414 to obtain one.
6. Take the reclaimed mercury from the aspirator pump or the mercury vacuum jar and transfer it into an Hg Absorb Jar for disposal. Contaminated Mercon wipes and used mercury absorbent can also be placed in an Hg Absorb Jar for disposal. If the Hg Absorb Jar is not large enough, use the included ziplock bags to store additional contaminated cleanup materials. Used Hg Absorb Jars should also be placed in ziplock bags. Move the bagged reclaimed mercury and cleanup materials away from the spill area and apply "Contaminated" labels.
7. Using a Jerome[®] Mercury Vapor Analyzer with the probe in the intake, take air samples at and around the cleaned up spill location. Verify that the reading on the display of the Jerome[®] instrument is less than $0.025\text{mg}/\text{m}^3$ ($25\mu\text{g}/\text{m}^3$). If readings are above $0.025\text{mg}/\text{m}^3$ ($25\mu\text{g}/\text{m}^3$), perform the cleanup procedure again.
8. If the spill was in a carpeted area and after the carpet is cleaned it still shows readings above $0.025\text{mg}/\text{m}^3$ ($25\mu\text{g}/\text{m}^3$), obtain a razor knife (not included) and cut out the contaminated section of carpet. Wrap the contaminated carpet in trash bags and move to an outside area.
9. Once the cleanup has been performed and the Jerome[®] instrument reads less than $0.025\text{mg}/\text{m}^3$ ($25\mu\text{g}/\text{m}^3$), then the cleanup is complete.

10. Dispose of the reclaimed mercury and ziplock bags according to local regulations.

11. Never do any of the following:

Never use a household vacuum to clean up spilled mercury.

Never wash mercury soiled items in a washing machine.

Never use a broom on a mercury spill because it will scatter the droplets and make it harder to clean up.

Never pour mercury down the drain

Never heat or incinerate mercury-soiled items.