

Collection of Gas Samples Using a Hand Pump and Gas Bags

Note: The provided gas bags are NOT intended for gases containing hydrogen sulfide (H₂S, sour gas)

1. Remove a gas bag from its shipping container, and using a soft-tip, permanent pen (e.g. Sharpie®), record all pertinent information directly onto the bag. Also record pertinent information on the chain-of-custody form provided.
2. Attach the inlet tubing of the hand pump provided (black end) to the monitoring probe or sampling point and pump for a sufficient length of time to purge the system of air. The purge gas may be vented to the atmosphere.
3. While pumping slowly, insert the male luer fitting on the outlet of the hand-pump (clear end) into the luer-fit valve on the gas bag with a slight twisting motion. Inserting the male luer fitting depresses the valve stem and opens the valve. The tapered design of this fitting allows for a leak-tight friction fit.
4. The bag can be filled with about 10-15 squeezes of the bulb (≤300 ml per bag). To allow space for expansion during shipment, the bag should only be filled to about ⅔ of capacity. The bag is properly filled when it is about 1 inch thick, as shown in the picture below.
5. Once the bag is filled, remove the fitting from the bag. Although these bags are durable, they can be damaged if not handled properly. Be careful not to crease or puncture the bags. Sample storage: -4°F (-20°C) TO +122°F (+50°C)
6. Return the bags to their individual boxes and then place them into to the gasketed 5-gallon shipping container in which they were received (no more than 3 bags per 5-gallon shipper). Samples should be shipped to the laboratory for analysis as soon as possible.



UNDER-FILLED



CORRECT



OVER-FILLED

In preparing the sampling equipment described above we have tried to provide the user with the equipment and instructions necessary for the safe collection of gas samples under normal conditions. These have been prepared assuming that they will be used by someone who is familiar with the collection of natural gas samples and is fully aware of standard safety procedures and precautions. Isotech is not responsible for accidents resulting from improper use of this equipment or from use of unsafe practices.