



## P4502 DOSIMETER HOLDER

### Technical and Usage Information

#### Instructions for Use

GEX dosimeter film holders are specially designed to positively control the dosimeter position throughout the readout process and to minimize light scatter from the film surfaces. They are precision machined to specified tolerances.

The center of the aperture is 8.0mm from the bottom of the holder. The holder is 12.7mm across and 13.3mm thick. The back portion of the holder has a conical opening that must face in the direction of the instrument light source. The back surface of the holder is flat and faces away from the beam. Users should be careful to align and use the holder correctly. If the holder is positioned backwards you will obtain inaccurate readings.

Open the sample compartment lid on the spectrophotometer and insert the dosimeter holder into the cuvette holder bracket. The holder needs to be positioned fully down in the cuvette holder for accurate measurements. The spring in the cuvette holder positions the dosimeter holder into the proper vertical alignment within the instrument. Only moderate pressure is required during insertion. Shut the sample compartment lid gently. Do not force the dosimeter holder down too hard or slam the lid as these can jar the alignment of lamp or the light detector and cause the instrument to lose zero.

Check your zero reading before each session and frequently throughout the session to be sure that the holder is positioned properly during use. See GEX procedure 100-251 for a recommended practice for qualifying personnel to perform measurements using the WINdose System.

Dosimeters should lie completely flat and should not be force fit. Trim any excess material from dosimeter edges if necessary. Observe film surfaces for scratches or dents that may affect measurement results.

#### Maintenance

Users are advised to observe wear and tear on both the holder and the cuvette (holder bracket) over time. Daily checks should be made and periodic replacements should be considered.

Use filtered or clean air washes to remove particulate build-up from the holder, as well as the cuvette and cup as needed. Wash with mild soap and water. Rinse thoroughly and dry completely before use. If necessary use a small diameter swab to clean the apertures. Routinely clean and replace the cuvette holder (part #336026-000) as needed.

#### CAUTION:

*This GEX holder was specifically designed for use in a Thermo Electron Corporation Genesys™ series single cuvette holder (GEX Product #P4121). They have not been tested in other instruments. Using these holders in any other cuvette holder or bracket should be done with caution, and requires the user to validate the P4502 holder for use with that particular configuration. Make sure the holder rests reproducibly and positions correctly so that the holder aperture is centered in the beam spot.*

*Contact GEX Corporation for assistance. Custom designed dosimeter film holders are available.*



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