

OPTOLON 2TM CARE AND CLEANING PROCEDURES

The best way to maintain cleanliness of your Optolon 2TM coated sphere or plaque is to prevent it from contamination in the first place. While this isn't always possible, a common-sense approach is all that's required when the situation warrants it:

BASIC CARE

- Avoid contact with the surface.
- Refrain from eating or drinking in the vicinity.
- Avoid sneezing, coughing, etc. on the surface if at all possible.
- If there must be frequent hand operations close to the surface, wear clean, white, cotton gloves to minimize the transfer of skin oils onto the coating through accidental contact. Change to fresh, clean gloves before soil becomes visible on the gloves.
- Keep the port covered whenever it is not in use to prevent unnecessary dust or vapors from entering the sphere.
- If using a plaque, keep it covered when not in use. Store it with the original cover in place in its container. A clean, loose-fitting polyethylene bag slipped over the plaque is a suitable substitute in certain instances.

CONTAMINATION

Should the Optolon 2TM surface become contaminated, the following remedies can be applied:

- To remove dust, blow off the surface with clean dusting gas or pure compressed nitrogen. Compressed "shop air" is not recommended, as traces of compressor pump oil may be deposited on the surface.
- For oily soiling, a mild detergent solution may be used:
 - Mix a few drops of liquid dishwashing detergent with a pint (500 ml) of distilled water.
 - With a clean, soft, white, lint-free cloth as an applicator, test a small area by moistening a spot where the soil is worst.
 - Use a gentle circular motion on the spot. If there is some improvement, continue scrubbing with only as much pressure as necessary to remove the contamination without noticeably abrading, polishing, or deforming the surface. Discontinue scrubbing when no further improvement is apparent.

- To remove the solution along with residual dislodged or dissolved contamination, rinse with pure distilled water. Blot off any water on the surface with a fresh clean cloth.
- Allow the Optolon 2TM coating to air-dry thoroughly.

STUBBORN MARKS

For stubborn marks, a somewhat destructive last-resort method that can be attempted:

- Using sandpaper that is whitish in color, lightly abrade the surface no more than necessary - to a maximum of 0.5 mm of thickness removed. In order to function properly as a diffuse reflector, the material must have a certain thickness.
- Blow or vacuum away the powdered coating. Though it is not toxic, avoid breathing any dust.

If the above steps are unsuccessful, the contamination is probably in the bulk material of the coating rather than on the surface, and no further cleaning operations will be helpful. At this point, the sphere or plaque should be replaced or returned to Optronic Laboratories for recoating.

In any case, the reflectance of the Optolon 2TM surface will have changed when the surface becomes soiled or in the course of any of the above cleaning steps. A fresh calibration is necessary to assure continued measurement accuracy.

TEMPERATURE LIMITS

- Temperatures below freezing have not been tested nor are they recommended.
- Maximum temperature is 150°C, though it is recommended staying below this point, otherwise the material will depolymerise and give off monomer.
- The paint and adhesives used in the assemblies have a maximum temperature limit of 85°C.

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As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.