

Oleophobicity Grade and Cytonix FluoroPel

Oleophobicity refers to a material’s ability to repel oils with different surface tension properties. Lower surface tension liquids tend to penetrate venting material more easily defeating the material’s venting capability.

Oleophobicity grade is assigned using the AATCC Spec 118-1992 guidelines. A higher oleophobicity grade indicates greater resistance to low surface tension fluids and oils. The test begins by placing five 50-microliter drops of the number 1 fluid on the test material surface (please see table below). If after 30 seconds, 3 of the 5 drops do not penetrate the media, the drops are removed by blotting with white textile blotting paper. The test proceeds with the next fluid as outlined in the table below. This procedure will continue until 3 of 5 drops penetrate the media. The oleophobicity grade is the previous fluid number.

Cytonix FluoroPel membranes 6 can help venting devices achieve oleophobicity grades of 6.

FluoroPel membranes 7 can help achieve oleophobicity grades of 7 or 8. FluoroPel membranes 8 can help devices achieve oleophobicity grades of 8. More information can be found at <http://www.cytonix.com/oleophobic-coating-s/1870.htm>. Sound transparency and venting can be optimized by using lowest possible concentration of FluoroPel that meets the needed oleophobicity grade.



Oleophobic Grade Number	Oil
0	Fails Mineral Oil
1	Kaydol / Mineral Oil
2	Kaydol:Hexadecane (65:35 by volume)
3	Hexadecane
4	Tetradecane
5	Dodecane
6	Decane
7	Octane
8	Heptane

Copyright Cytonix LLC

The information in this document is believed to be correct on the date of issue. Judgments of the suitability of the information for the purchaser’s purposes are the purchaser’s responsibility. Although reasonable care has been taken in the preparation of this information, Cytonix extends no warranties, makes no representations, and assumes no responsibility as to the suitability of the information for the purchaser’s application.

8000 Virginia Manor Rd, #130
 Beltsville, MD 20705, USA
www.cytonix.com
emailbox@cytonix.com
 301.470.6267