

MaProDe_Ox Tool v.3

2011-2013
MaProDe_Ox Material Distribution & Oxygen Permeability

Outlook of the interactive tool .
It's too big to add as supplementary file
We suggest to put this tool online after
publication of the results.



| | 3% | 12% | 12% | 9% | 14% | 22% | 6% | 3% | 9% | 6% | 12% | 14% | 9% | 12% | 12% | 3% | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1% | 12% | 33% | 30% | 57% | 88% | 73% | 53% | 50% | 56% | 64% | 60% | 56% | 55% | 50% | 50% | 56% | 60% |
| 8% | 19% | 39% | 28% | 46% | 80% | 59% | 43% | 44% | 59% | 57% | 52% | 53% | 69% | 49% | 51% | 53% | 53% |
| 10% | 24% | 38% | 28% | 44% | 83% | 57% | 42% | 45% | 60% | 55% | 52% | 48% | 42% | 42% | 48% | 52% | 58% |
| 10% | 27% | 38% | 21% | 38% | 78% | 48% | 39% | 54% | 60% | 57% | 50% | 52% | 46% | 46% | 52% | 56% | 57% |
| 12% | 30% | 32% | 20% | 33% | 70% | 53% | 38% | 54% | 56% | 58% | 55% | 51% | 51% | 55% | 55% | 58% | 56% |
| 5% | 22% | 24% | 18% | 33% | 70% | 60% | 55% | 51% | 56% | 51% | 57% | 57% | 51% | 51% | 57% | 57% | 51% |
| 10% | 21% | 18% | 17% | 33% | 70% | 61% | 57% | 46% | 50% | 44% | 47% | 51% | 52% | 52% | 51% | 47% | 44% |
| 10% | 18% | 22% | 23% | 42% | 83% | 61% | 55% | 46% | 52% | 48% | 46% | 46% | 46% | 48% | 48% | 52% | 46% |
| 8% | 18% | 34% | 30% | 53% | 82% | 67% | 61% | 54% | 58% | 50% | 49% | 44% | 43% | 43% | 43% | 49% | 50% |
| 4% | 7% | 18% | 30% | 56% | 87% | 72% | 64% | 63% | 62% | 58% | 55% | 51% | 47% | 47% | 51% | 55% | 58% |
| | | | | | | 87% | 84% | 79% | 78% | 72% | 67% | 67% | 60% | 60% | 67% | 72% | 76% |
| | | | | | | 50% | 40% | 35% | 38% | 33% | 21% | 18% | 19% | 15% | 18% | 23% | 33% |
| | | | | | | 23% | 24% | 21% | 24% | 19% | 16% | 13% | 12% | 13% | 16% | 19% | 24% |
| | | | | | | 14% | 19% | 18% | 43% | 42% | 39% | 40% | 30% | 38% | 40% | 39% | 42% |
| | | | | | | 6% | 23% | 29% | 11% | 11% | 12% | 10% | 10% | 10% | 12% | 11% | 11% |
| | | | | | | 1% | 6% | 9% | 12% | 9% | 7% | 5% | 6% | 6% | 5% | 7% | 7% |

| | cc/(m ² ·day·atm) | cc·20µm/(m ² ·day·atm) | cc/(kg·day·atm) |
|-------------------------------|------------------------------|-----------------------------------|-----------------|
| Flat material | 149 | 3006 | 7.0 |
| Tray | 234 | 2721 | 11.0 |
| Tray calc. acc. thickness | 258 | 3006 | 12.2 |
| Tray calc. acc. surface ratio | 285 | 3006 | 13.4 |

Transmission rate & Permeation

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Example of the thin PP material 50 mm tray.
OTR results are recalculated into different units.