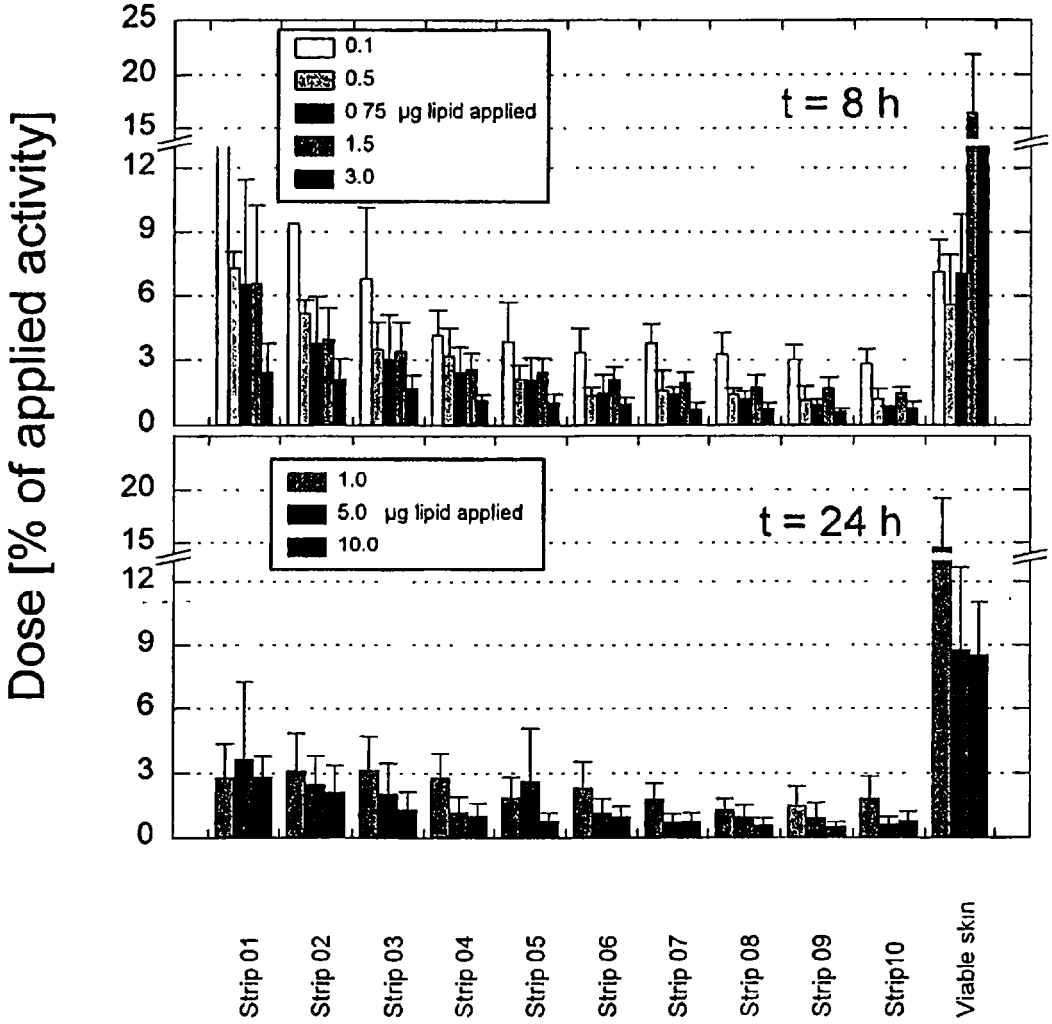


Figure 1

163163

G00001

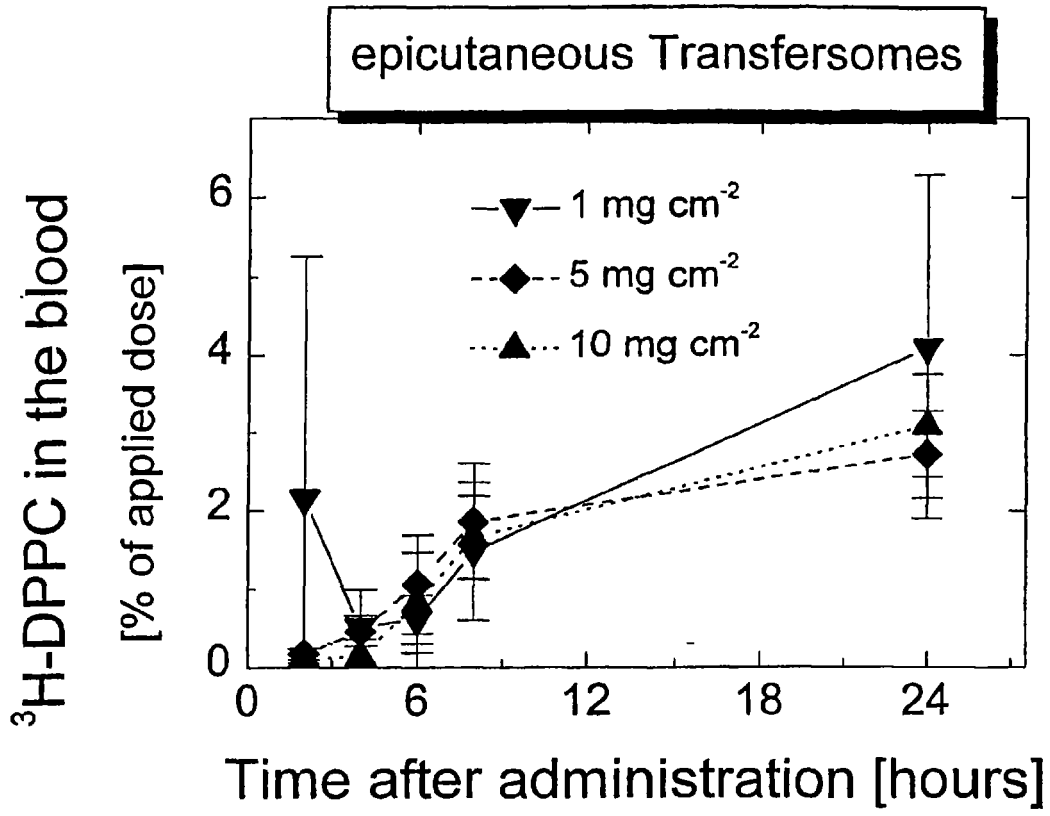

epicutaneous Transfersomes
^{3}H-DPPC in the blood
[% of applied dose]
1 mg cm^{-2}
5 mg cm^{-2}
10 mg cm^{-2}
0
2
4
6
0
6
12
18
24
Time after administration [hours]

Figure 2

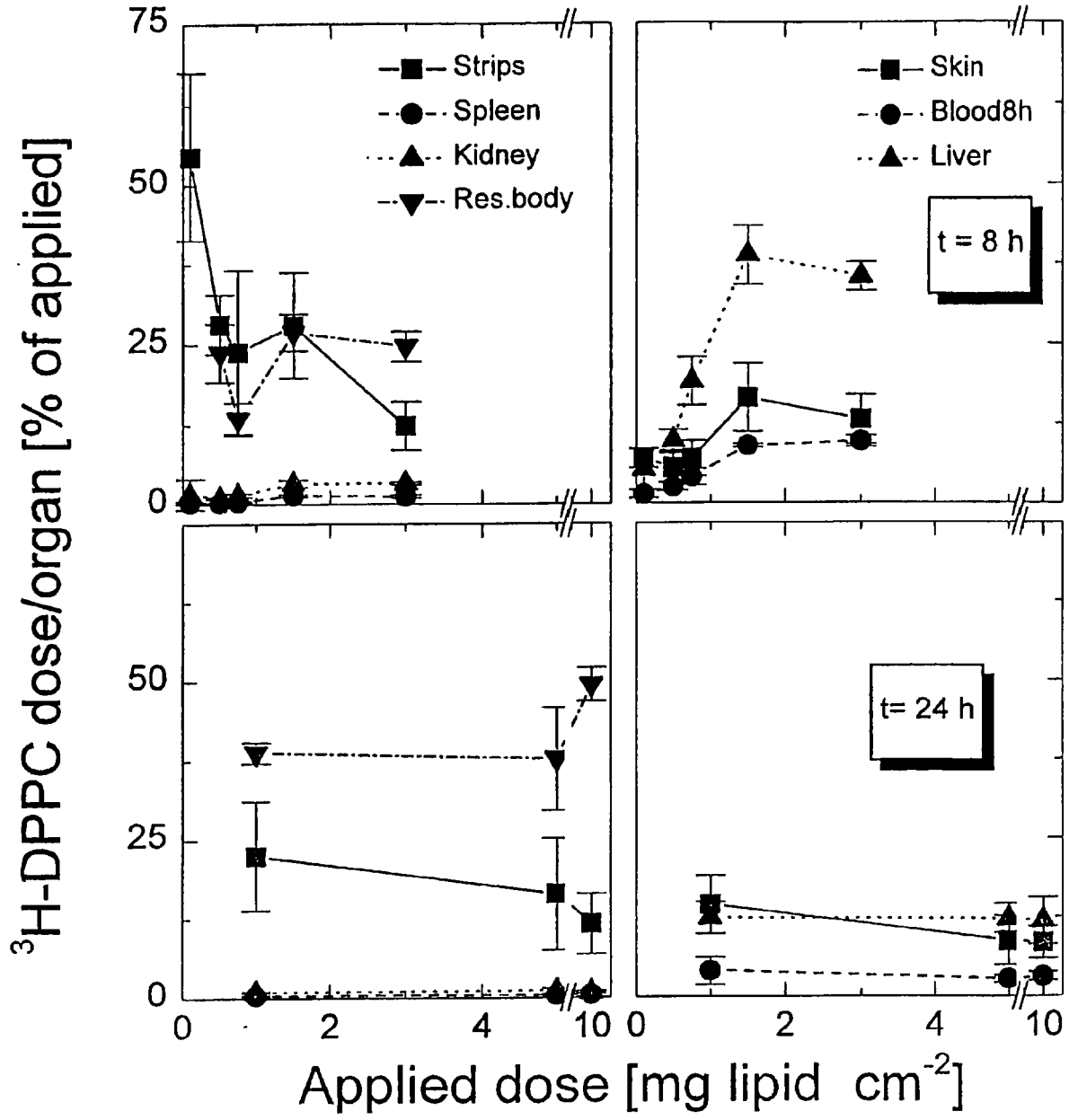

75
50
25
0
Strips
Spleen
Kidney
Res.body
Skin
Blood8h
Liver
t = 8 h
t= 24 h
^{3}H-DPPC dose/organ [% of applied]
0
2
4
10
Applied dose [mg lipid cm^{-2}]

Figure 3

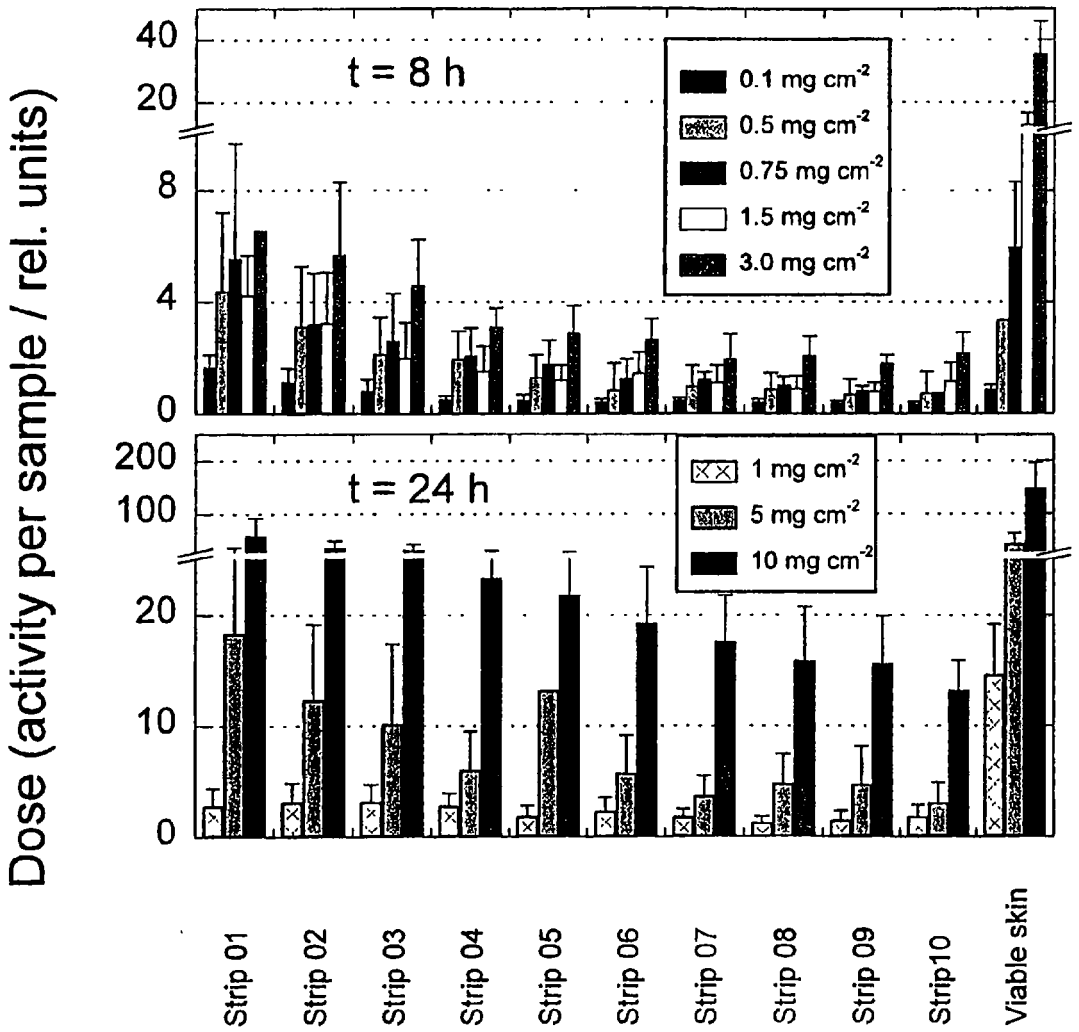

Dose (activity per sample / rel. units)
t = 8 h
0.1 mg cm-2
0.5 mg cm-2
0.75 mg cm-2
1.5 mg cm-2
3.0 mg cm-2
t = 24 h
1 mg cm-2
5 mg cm-2
10 mg cm-2
Strip 01
Strip 02
Strip 03
Strip 04
Strip 05
Strip 06
Strip 07
Strip 08
Strip 09
Strip10
Viable skin

Figure 4

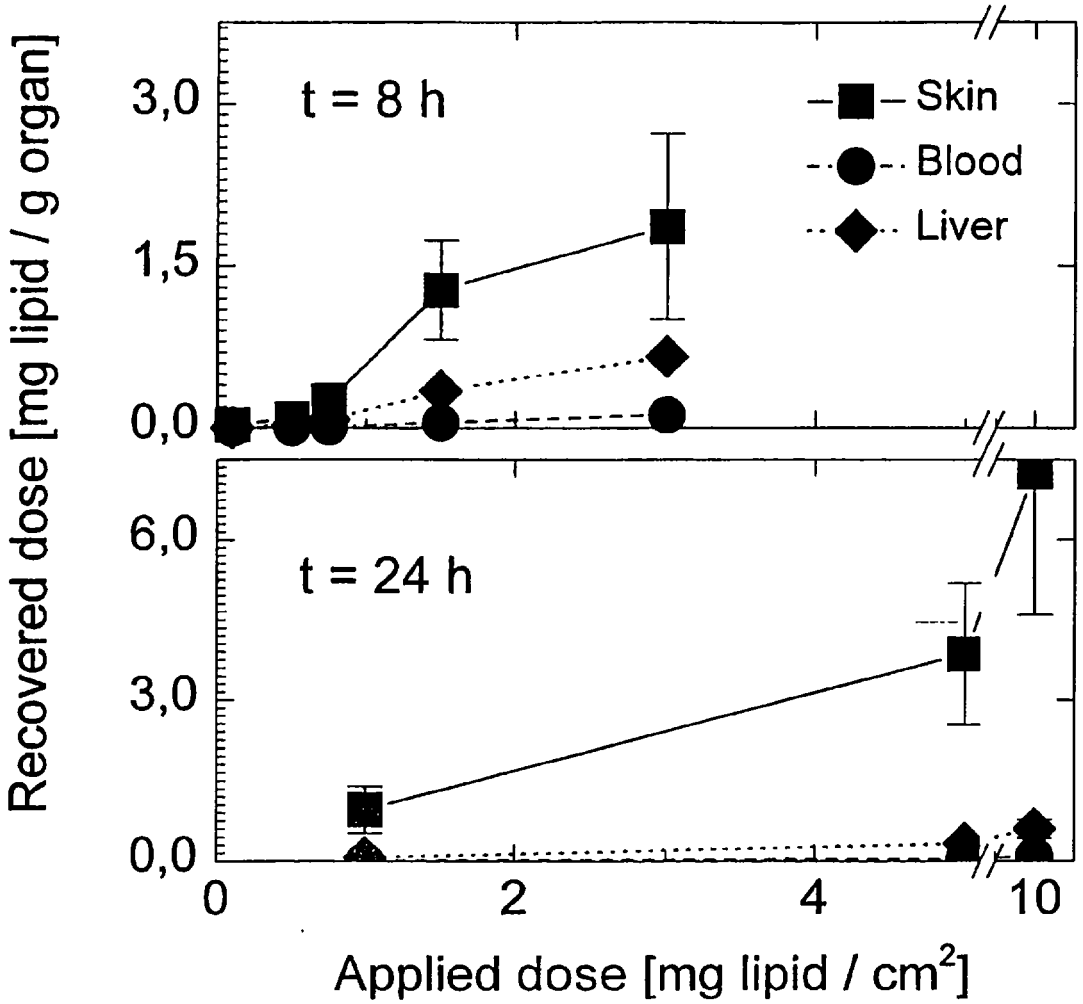

t = 8 h
t = 24 h
Skin
Blood
Liver
3,0
1,5
0,0
6,0
3,0
0,0
0
2
4
10
Recovered dose [mg lipid / g organ]
Applied dose [mg lipid / cm²]

Figure 5

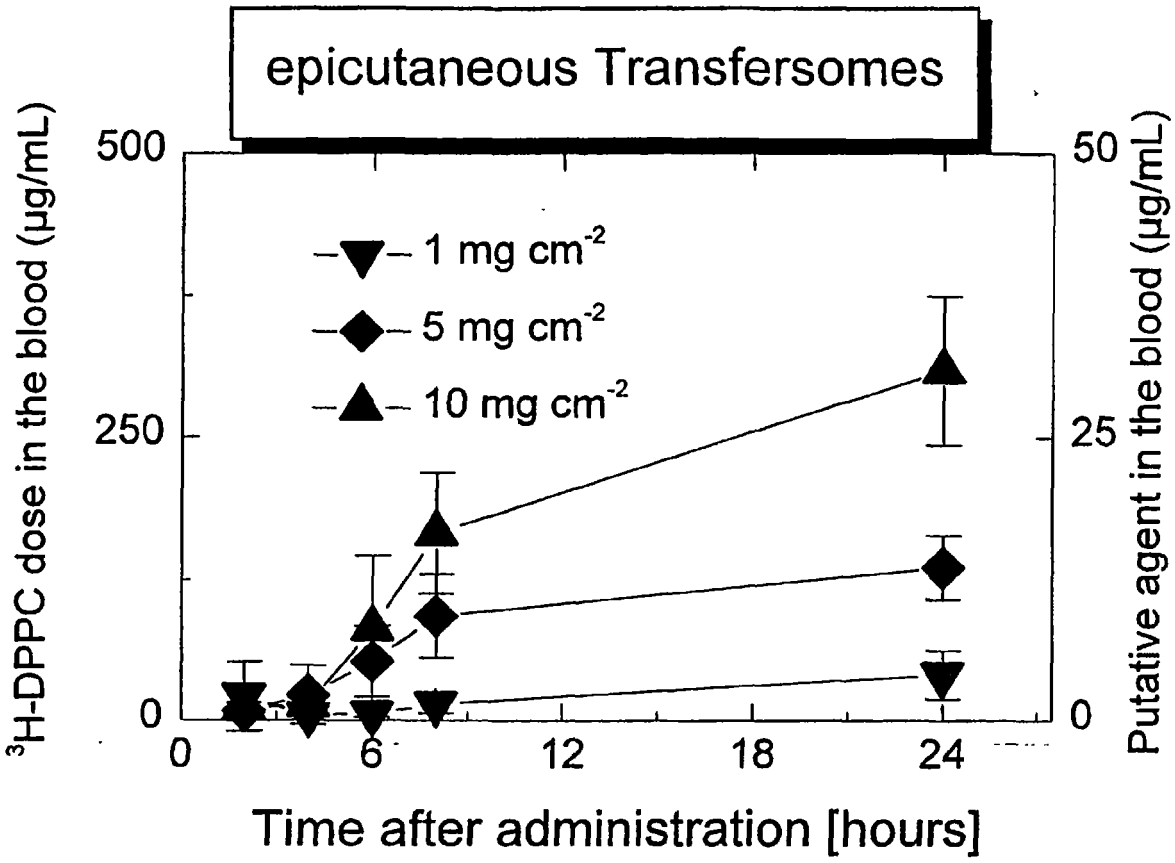

epicutaneous Transfersomes
500
250
0
50
25
0
1 mg cm-2
5 mg cm-2
10 mg cm-2
3H-DPPC dose in the blood (µg/mL)
Putative agent in the blood (µg/mL)
0
6
12
18
24
Time after administration [hours]

Figure 6

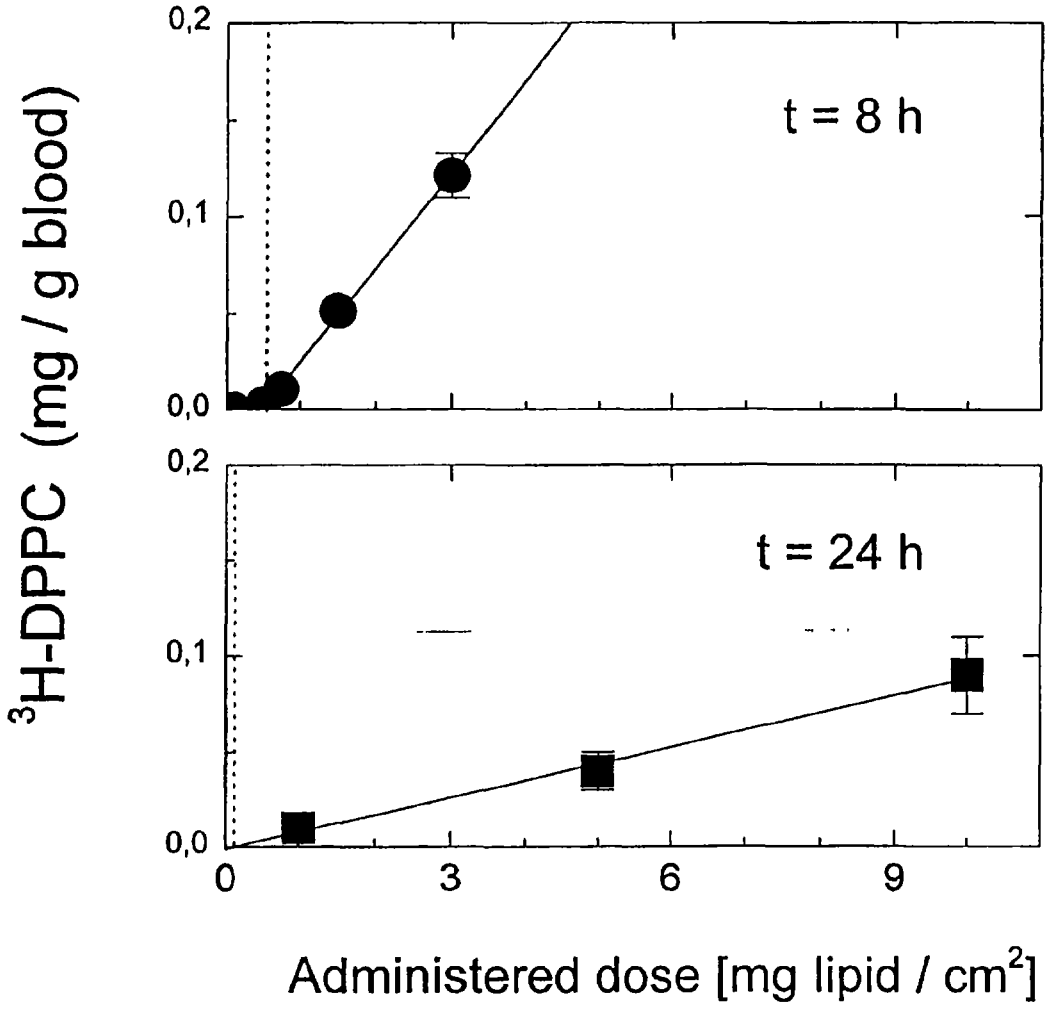
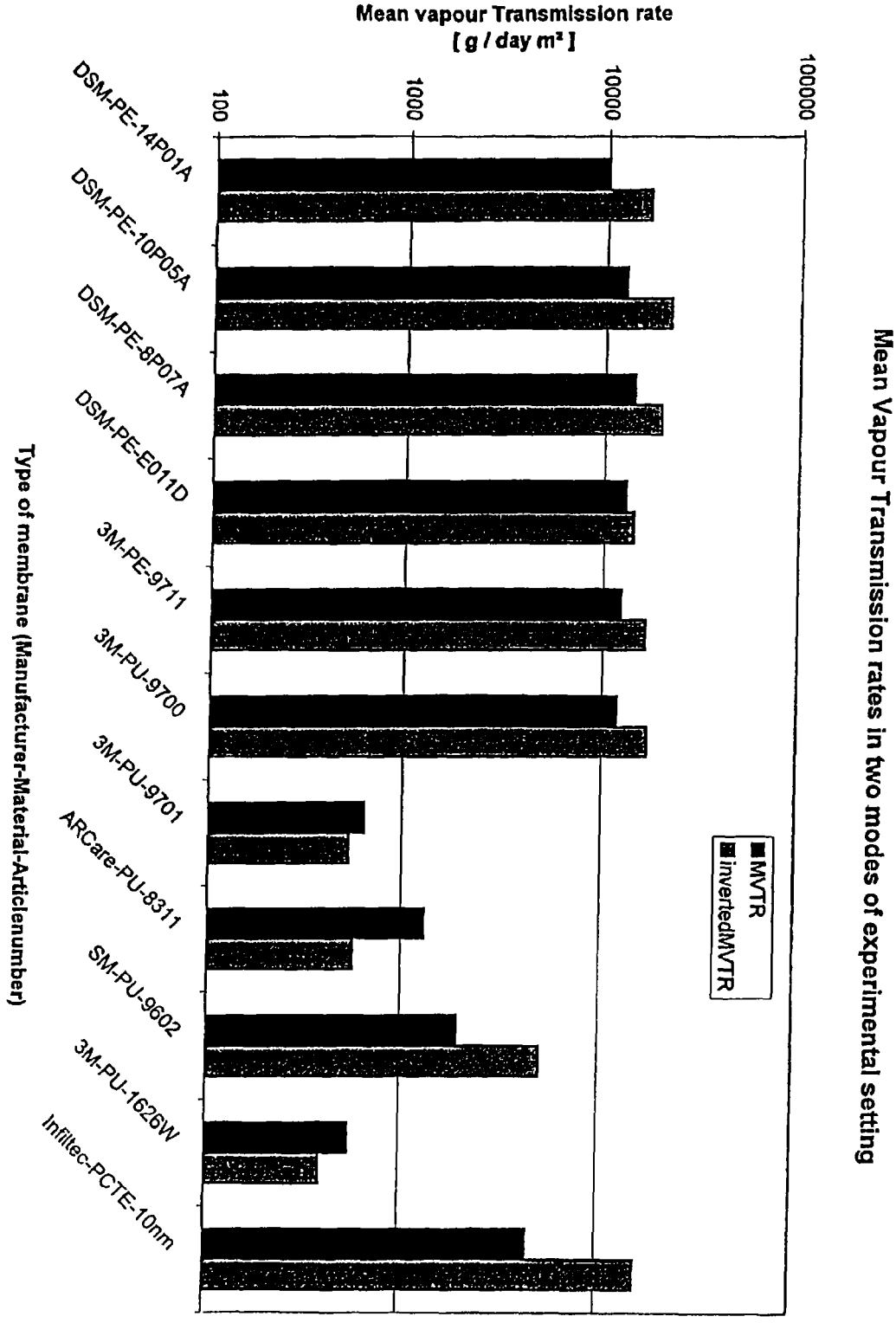

0,2
0,1
0,0
t = 8 h
0,2
0,1
0,0
t = 24 h
0
3
6
9
^{3}H-DPPC (mg / g blood)
Administered dose [mg lipid / cm^2]

Figure 7

Figure 8


Mean vapour Transmission rate
[g / day m²]
100
1000
10000
100000
DSM-PE-14P01A
DSM-PE-10P05A
DSM-PE-8P07A
DSM-PE-E011D
3M-PE-9711
3M-PU-9700
3M-PU-9701
ARCare-PU-8311
SM-PU-9602
3M-PU-1626W
Infiltec-PCTE-10nm
Type of membrane (Manufacturer-Material-Articlenumber)
MVTR
invertedMVTR
Mean Vapour Transmission rates in two modes of experimental setting

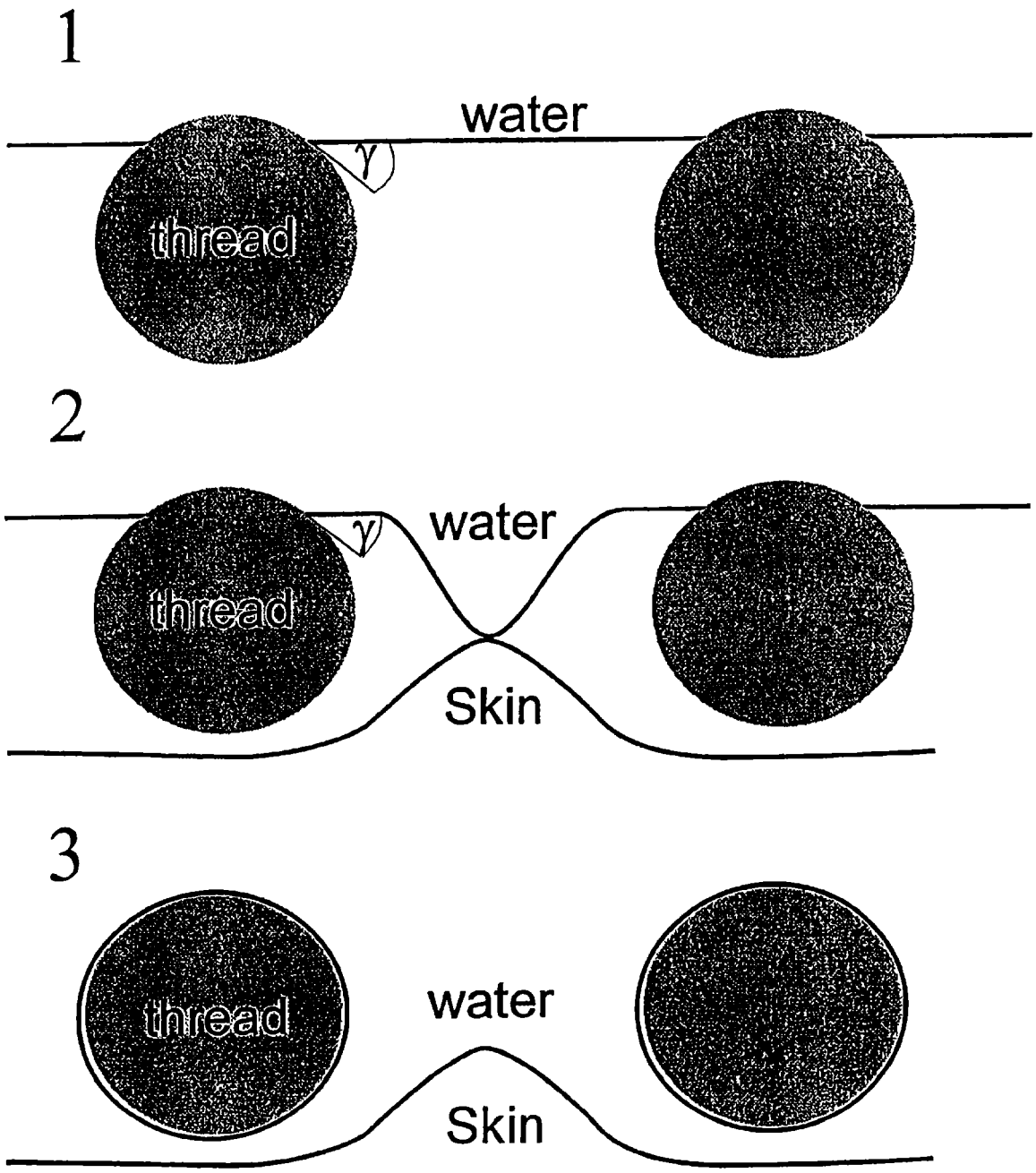


Figure 9

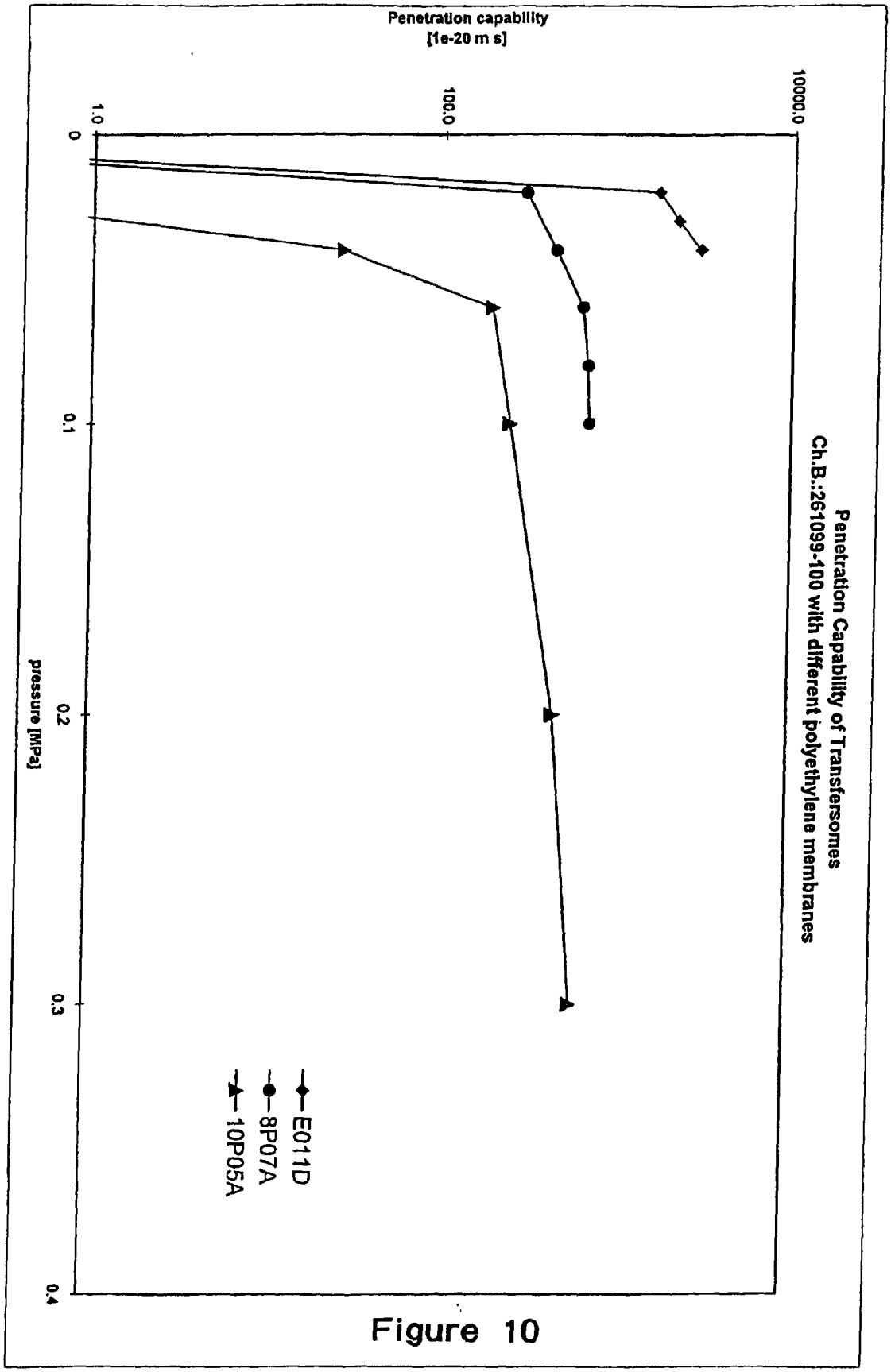

Penetration capability
[1e-20 m s]
1.0
100.0
10000.0
0
0.1
0.2
0.3
0.4
pressure [MPa]
Penetration Capability of Transfersomes
Ch.B.:261099-100 with different polyethylene membranes
E011D
8P07A
10P05A

Figure 10

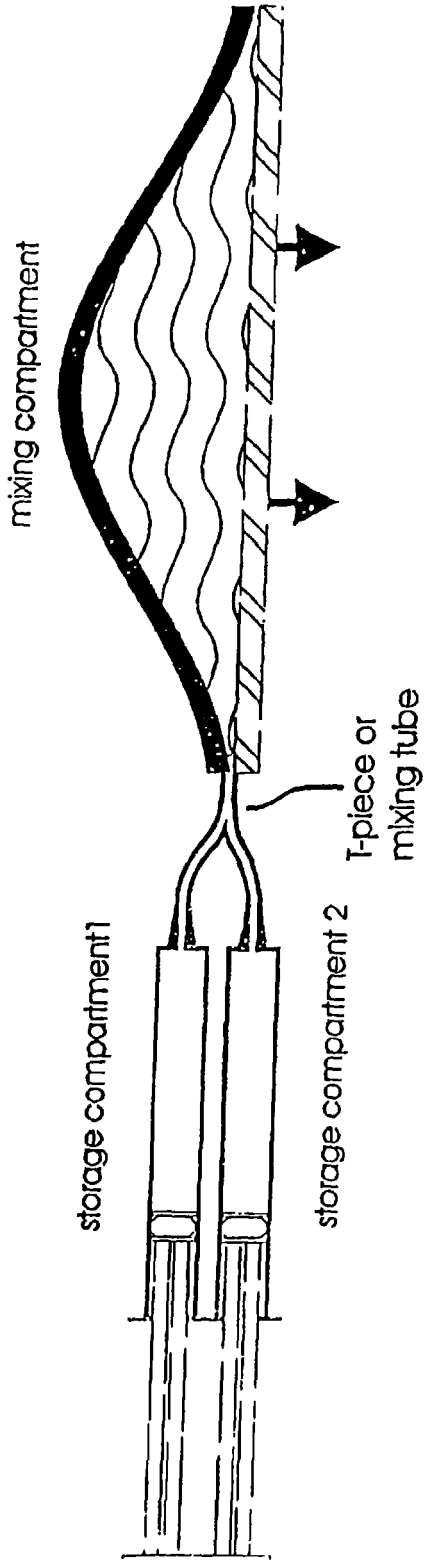

mixing compartment
T-piece or
mixing tube
storage compartment 1
storage compartment 2

Figure 11

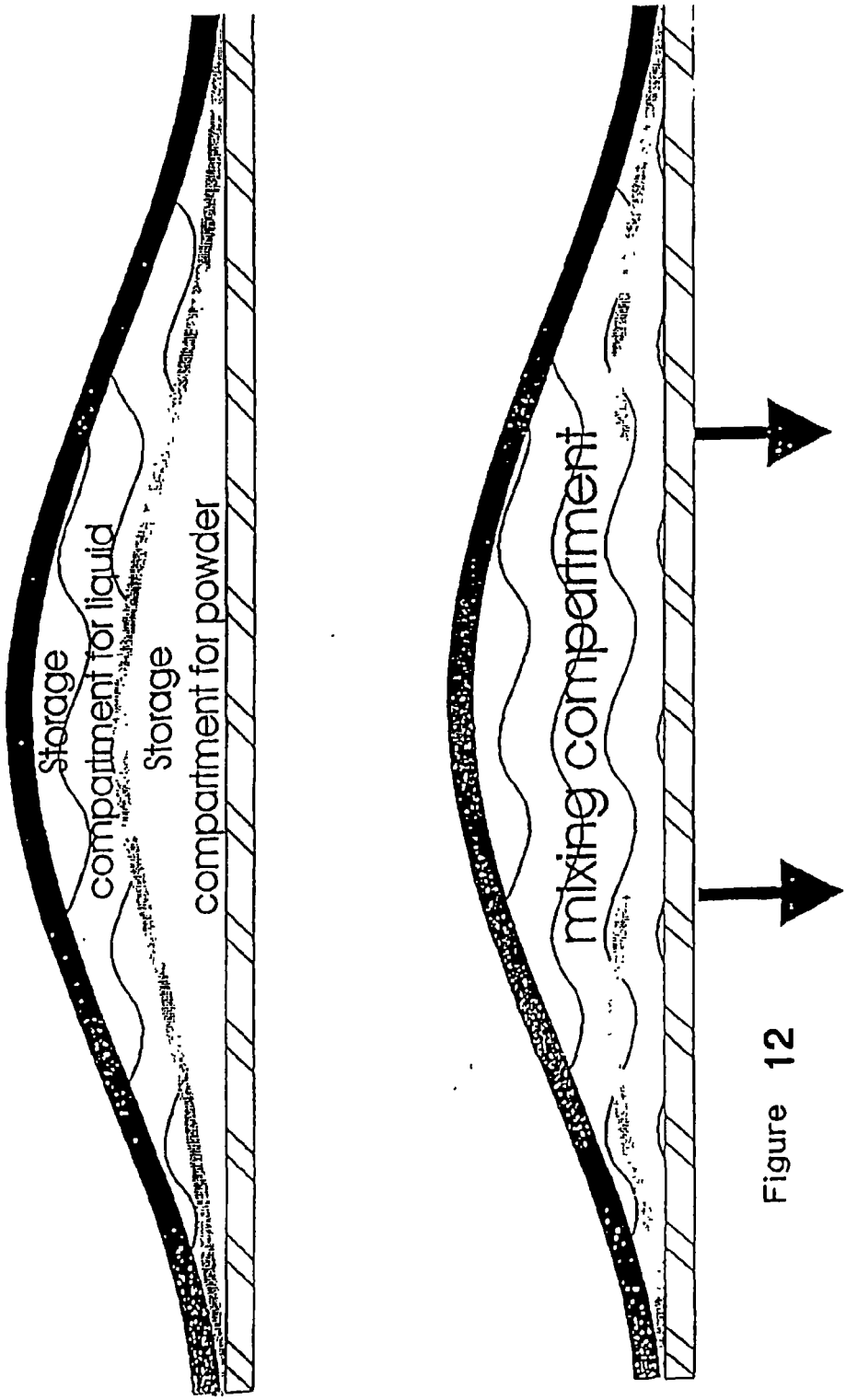

Storage compartment for liquid
Storage compartment for powder
mixing compartment

Figure 12

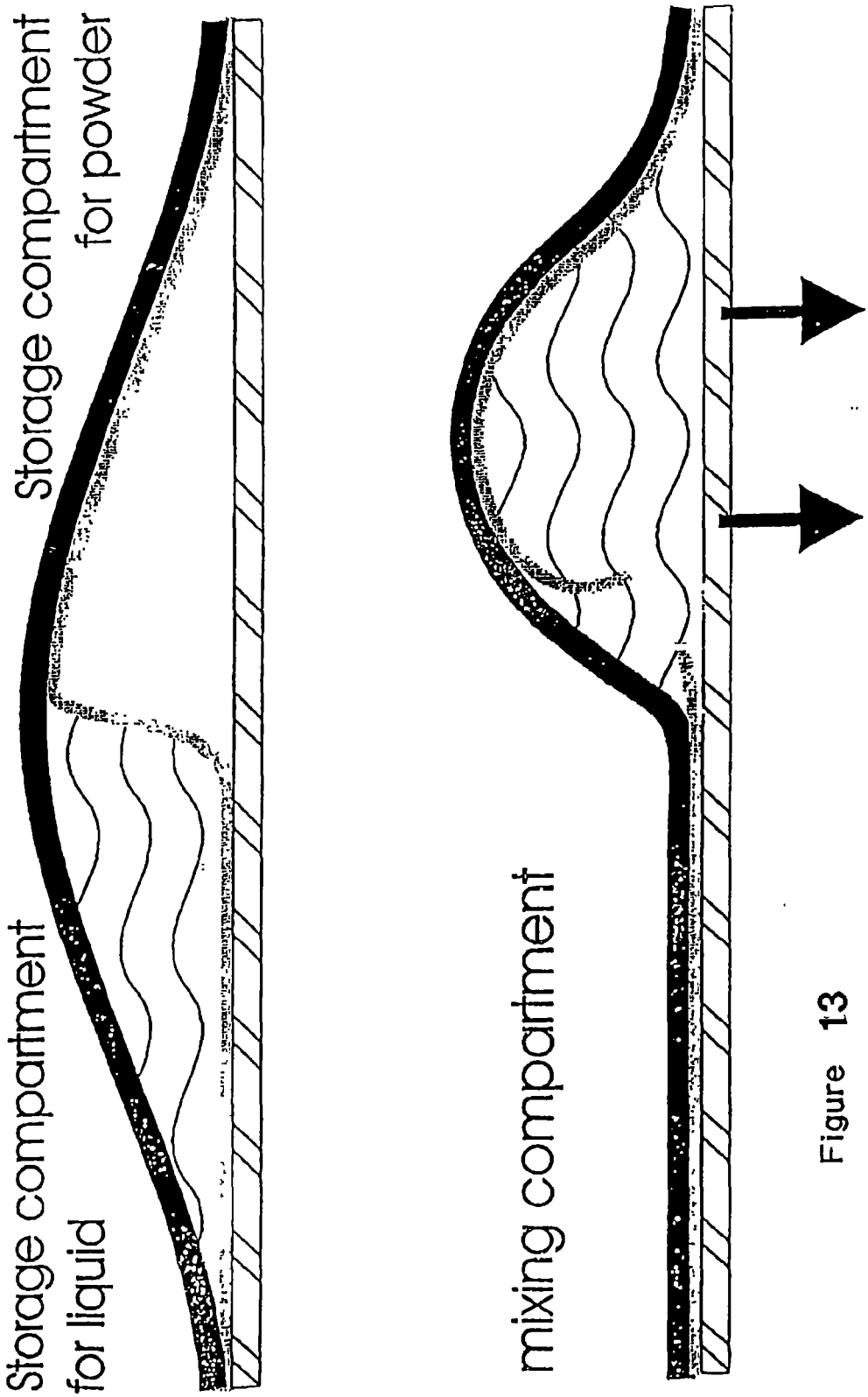

Storage compartment for powder
Storage compartment for liquid
mixing compartment

Figure 13

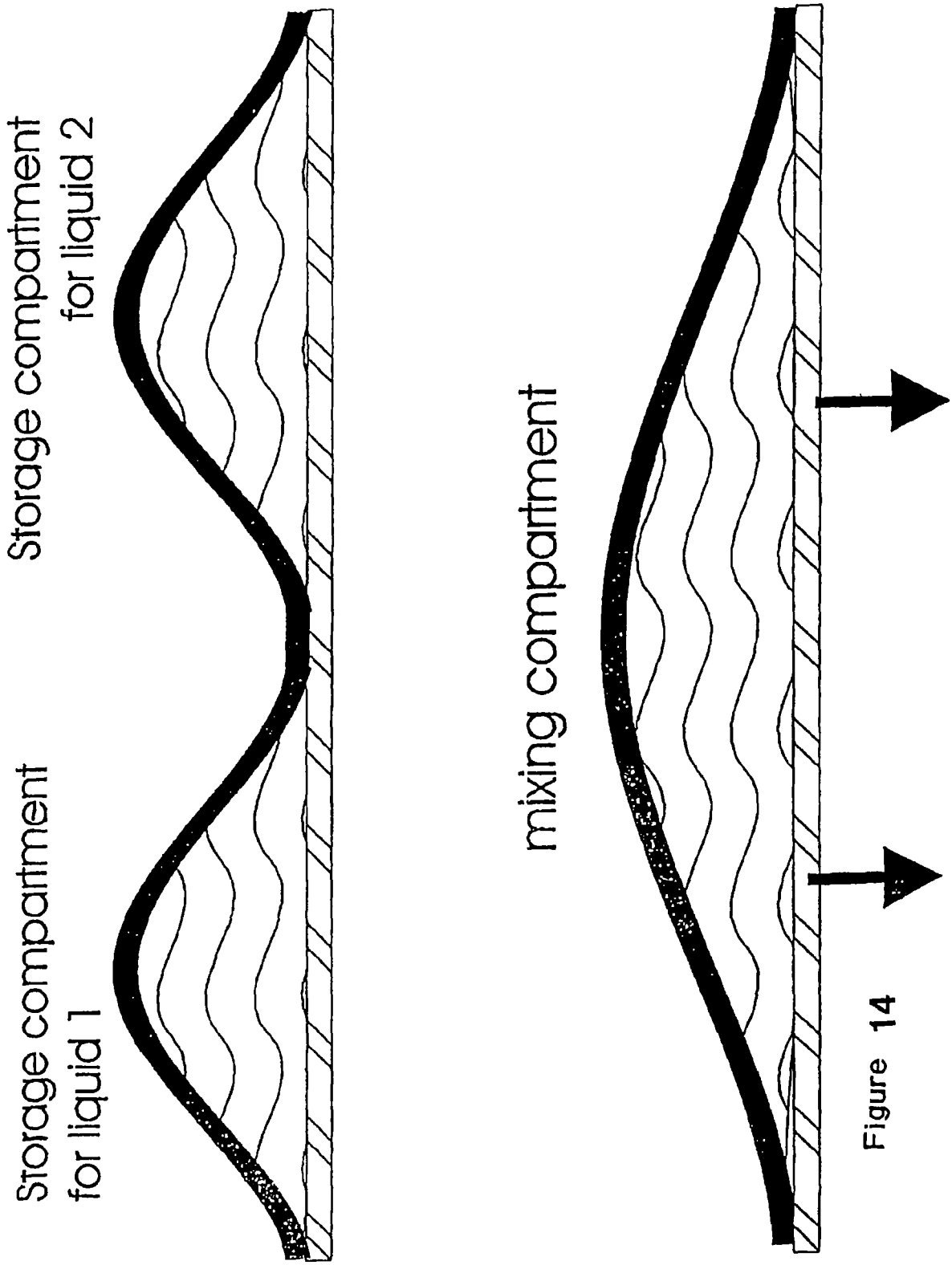

Storage compartment for liquid 1
Storage compartment for liquid 2
mixing compartment

Figure 14