-continued

Ingredient	Conc. (wt)
Uniphen-23 ®	1.5 mg
Water	80.35 g

Weighed amounts of PEG-12 Glyceryl Dioleate, Betamethasone diproprionate and cholesterol were combined and heated to 50° C. while mixing. Uniphen-23® and water were combined an heated to 50° C. When mixtures reached temperature they were commingled while stirring gently. Mixture was cooled to room temperature while stirring. Examination by optical microscope at 100× and 600× showed a suspension of multilamellar liposomes.

Example 6

Spontaneous Liposomes with Active Compounds for Topical Anesthesia

Ingredient	Conc.
Tetracaine	2 g
PEG-12 GDO	20 g
Uniphen-23 ®	1.5 g
Water	76.5 g

Tetracaine, PEG-12 Glyceryl Dioleate, and Uniphen-23® were mixed together and heated to 40° C. while stirring. Water was heated to 40 degrees C. and added to the tetracaine solution while stirring gently. Mixture was cooled to room temperature. Examination by electron microscope showed LUV's and MLV's.

Example 7

Spontaneous Liposomes for Intravenous and Topical Formulations

Tretinoin (all-trans retinoic acid), 6 mg, was dissolved in 500 ul of PEG-12 Glyceryl Dioleate. Dissolution was complete. Distilled water, 4.5 ml, was added to the mixture and gently mixed. This yielded a concentration of 1 mg/ml. Examination by optical microscope showed multilamellar liposomes in the size range of 100 nm to 200 nm. This solution can easily be incorporated into a cream, gel or lotion dosage form.

While embodiments and applications of this invention have been shown and described, it would be apparent to those skilled in the art having the benefit of this disclosure that many more modifications than mentioned above are possible without departing from the inventive concepts herein. The invention, therefore, is not to be restricted except in the spirit of the appended claims.

What is claimed is:

1. A liposome comprising:

one or more lipids where the total lipids have a P_a between about 0.84 and 0.88 and a P_v between about 0.88 and 0.93,

where P_a is the packing parameter with respect to surface and P_v is the packing parameter with respect to volume,

where one or more of the lipids is a diacylglycerol-PEG,

where the melting point of the diacylglycerol-PEG is below about 40 degrees C., and

where the acyl chains of the diacylglycerol-PEG are greater than or equal to 14 carbons in length.

2. The liposome of claim **1**, where the PEG chain of the diacylglycerol-PEG has a molecular weight between about 300 Daltons and 5000 Daltons.

3. The liposome of claim **1**, where the diacylglycerol-PEG comprises dioleolylglycerol-PEG-12.

4. The liposome of claim **1**, further comprising an active compound.

5. The liposome of claim **4**, where the active compound is selected from the group consisting of proteins, peptides, nucleic acids, agents for treating neoplasms, agents for treating inflammation, agents for treating infections, agents for treating gasterointestinal diseases, agents for treating immunological diseases, agents for treating skin diseases eye diseases, agents uses in diagnosing disease, nutrients, agents for treating blood diseases, agents for treating metabolic diseases, agents for treating cardiovascular diseases, agents for treating renal diseases, agents for treating genitourinary diseases, agents for treating respiratory diseases, and agents for treating central nervous system diseases.

6. The product of a process consisting essentially of:

providing one or more lipids where the total lipids have a P_a between about 0.84 and 0.88 and a P_v between about 0.88 and 0.93, where P_a is the packing parameter with respect to surface and P_v is the packing parameter with respect to volume and where one or more of the lipids is a diacylglycerol-PEG having a melting point below about 40 degrees C. and also having acyl chains greater than or equal to 14 carbons in length, and

combining the lipid or lipids with an aqueous solution at a temperature above the melting point of the lipid or lipids.

7. The product of claim **6**, where the PEG chain of the diacylglycerol-PEG has a molecular weight between about 300 Daltons and 5000 Daltons.

8. The product of claim **6**, where the diacylglycerol-PEG comprises dioleolylglycerol-PEG-12.

9. The product of claim **6**, further comprising an active compound.

10. The product of claim **9**, where the active compound is selected from the group consisting of proteins, peptides, nucleic acids, agents for treating neoplasms, agents for treating inflammation, agents for treating infections, agents for treating gasterointestinal diseases, agents for treating immunological diseases, agents for treating skin diseases eye diseases, agents uses in diagnosing disease, nutrients, agents for treating blood diseases, agents for treating metabolic diseases, agents for treating cardiovascular diseases, agents for treating renal diseases, agents for treating genitourinary diseases, agents for treating respiratory diseases, and agents for treating central nervous system diseases.

* * * * *