

Section III

Bath and Shower Products

Bath Oil

Colourless, clear, low viscosity

<u>Ingredients:</u>	<u>Wt%</u>
A: Wacker-Belsil SDM 6022	1.00
Mineral Oil	69.00
B: Wacker-Belsil CM 020	25.00
Arlamol E	5.00
Preservatives, pigments, fragrances	q.s.

Heat A to 50C (mix in Wacker-Belsil SDM 6022 homogeneously), mix B into A.

Temperature stability: at 45C over 10 weeks.
Formulation 330 AH

Bath Oil

Colourless, clear, low viscosity

<u>Ingredients:</u>	<u>Wt%</u>
Wacker-Belsil CM 040	25.00
Mineral Oil	70.00
Arlamol E	5.00
Preservatives, pigments, fragrances	q.s.

Mix all components.

Temperature stability: at 45C over 10 weeks.
Formulation 350 AH

Shower Bath

Creamy, well foaming shower gel leaving a pleasant touch on the skin.

<u>Ingredients:</u>	<u>Wt%</u>
A: Texapon A	20.00
Texapon NA	20.00
B: Genapol PMS	3.00
Lanette O	1.00
C: Tylose H 4000 P	2.00
Wacker-Belsil DMC 6038	5.00
Water	49.00
Preservatives, fragrances, pigments	q.s.

Mix Tylose well into water, add Wacker-Belsil DMC 6038. Heat A and B each to 70C, mix B into A, add C.
Formulation 1347/3 AH

SOURCE: Wacker Silicones: Suggested Formulations

Bubble Bath

Starting formulation for an economical pearly bubble bath.

<u>Ingredients:</u>	<u>Wt%</u>
Sulfochem B-2090P	25.00
Water, soft	73.65
Fragrance	0.25
NaCl	typical: 0.80
Citric acid	typical: 0.05
Preservatives	q.s.
Hydrolyzed milk protein	0.25

Blending Procedure:

With medium agitation, mix water, Sulfochem B-2090P, and milk protein in main vessel. Add citric acid and mix until solution is homogeneous. Add preservatives, fragrance, color, and remaining ingredients. Adjust pH to 7.0-7.5 with citric acid. Adjust viscosity to 4,000-5,000 cps with sodium chloride.

Typical Physical Properties:

Viscosity: 4,000-5,000 cps
pH: 7.0-7.5
Formulation E3134

Bubble Bath

Prototype formulation for an economical bubble bath.

<u>Ingredients:</u>	<u>Wt%</u>
Sulfochem B-209	25.00
Water, soft	73.76
Fragrance	0.25
NaCl	typical: 0.90
Citric acid	typical: 0.09
Preservatives	q.s.

Blending Procedure:

With medium agitation, mix water and Sulfochem B-209 in main vessel. Add citric acid and mix until solution is clear and homogeneous. Add preservatives, fragrance, and color. Adjust pH to 6.5-7.5 with citric acid. Adjust viscosity to 3,500-5,000 cps with sodium chloride.

Typical Physical Properties:

Viscosity: 3,500-5,000 cps
pH: 6.5-7.5
Formulation E3129

SOURCE: Chemron Corp.: Suggested Formulations

Clear Mild Body Wash

<u>Raw Materials:</u>	<u>Wt%</u>
Mackam HPC-32 (Sodium Cocoamphoacetate)	5.0
Mackam 35-UL (Cocamidopropyl Betaine)	10.0
Mackalene 426 (Isostearamidopropyl Morpholine Lactate)	2.0
Mackpro WWP (Wheatgermamidopropyl Dimethylamine Hydrolyzed Wheat Protein)	1.0
Mackernium 007 (Polyquaternium-7)	2.0
Mackanate OM (Disodium Oleamide MEA Sulfosuccinate)	5.0
Mackanate EL (Disodium Laureth Sulfosuccinate)	5.0
Mackol 70NS (Sodium Laureth Sulfate)	17.0
Paragon III (Phenoxyethanol (and) DMDM Hydantoin (and) Methylparaben (and) Propylparaben)	qs
Fragrance, Water	qs to 100.0

Appearance: Viscous Lotion
 pH: 6.0-6.5
 Solids, %: 20.0-23.0

Procedure:

1. Completely disperse Mackernium 007 in water.
2. Add first seven components and mix thoroughly while heating to 35-40C.
3. Add Mackol 70NS and mix thoroughly.
4. Blend slowly and adjust pH to 6.0-6.5 with Citric Acid.
5. When product is completely homogeneous, add Paragon III.
6. Add Fragrance then cool and fill.

Emollient Bath Gelee

<u>Raw Materials:</u>	<u>Wt%</u>
Sodium Laureth Sulfate (60%)	20.0
Mackamide LLM (Lauramide DEA)	20.0
Mackanate EL (Disodium Laureth Sulfosuccinate)	20.0
Mackanate WGD (Wheatgermamido PEG-2 Sulfosuccinate)	10.0
Mackstat DM (DMDM Hydantoin)	qs
Water, Dye, Fragrance	qs to 100.0

Procedure:

1. Add Mackamide LLM to Sodium Laureth Sulfate.
2. Add remaining components.
3. Heat to 45C.
4. Blend until homogeneous.
5. Adjust pH to 6.5-7.0 with Citric Acid.
6. Cool to room temperature.

SOURCE: McIntyre Group Ltd.: Personal Care Formulary: Formulas

Conditioning Body Wash

<u>Raw Materials:</u>	<u>Wt%</u>
1. D.I. Water	qs
2. Mackol 70NS (Sodium Laureth Sulfate-70%)	20.0
3. Mackam HPC-32 (Sodium Cocoamphoacetate)	13.0
4. Mackamide CMA (Cocamide MEA)	1.0
5. Mackester EGMS (Glycol Stearate)	1.0
6. Mackamide S (Soyamide DEA)	1.0
7. Mackanate OPS (Disodium Oleamido MIPA Sulfosuccinate)	5.0
8. Mackpro WWP (Wheatgermamidopropyl Dimethylamine Hydrolyzed Wheat Protein)	1.5
9. Mackernium 007 (Polyquaternium 7)	2.0
10. Paragon III (Phenoxyethanol (and) DMDM Hydantoin (and) Methylparaben (and) Propylparaben)	qs
11. Ethylflo362 NF-Albemarle (Polydecene)	1.0
12. Fragrance	qs
13. Dye	qs
14. Citric Acid	0.3-0.6
15. Sodium Chloride	qs

This body wash will be a pearlescent viscous liquid (5,000-10,000 cps) with a pH of 5.5-6.5 and a concentration of approximately 30%.

Procedure:

- Charge ingredients 1,2, and 3; heat to 55-60C with moderate agitation. Mix until clear and homogeneous.
- At 60C, add 4 and 5. Heat to 70C and hold for one hour. Ensure that there is no unmelted particulate matter in the batch.
- After 4 and 5 are fully dispersed, cool liquid to 40C. Charge ingredients 6 through 13.
- Add 14 (citric acid) to adjust pH to 5.5-6.5.
- Add 15 (sodium chloride) or water to reach desired viscosity. Cool and fill.

Bath Gelee with Natural Lipid Protein

<u>Raw Materials:</u>	<u>Wt%</u>
Sodium Laureth Sulfate (60%)	20.0
Mackamide CS (Cocamide DEA)	20.0
Mackanate CP (Disodium Cocamide MIPA Sulfosuccinate)	20.0
Mackpro NLP (Quaternium-79 Hydrolyzed Collagen)	4.0
Paragon (Propylene Glycol (and) DMDM Hydantoin (and) Methylparaben)	qs
Water, Dye, Fragrance	qs to 100.0

Procedure:

- Add Mackamide CS to Sodium Laureth Sulfate and blend.
- Add remaining components. 3. Heat to 45C.
- Blend until homogeneous. 5. Adjust pH to 6.5-7.0 with Citric Acid. 6. Cool to room temperature.

SOURCE: McIntyre Group Ltd.: Personal Care Formulary: Formulas

Emollient Body Wash

<u>Raw Materials:</u>	<u>Wt%</u>
Mackam HPC-32 (Sodium Cocoamphoacetate)	14.0
Mackol 70NS (Sodium Laureth Sulfate-70%)	17.0
Mackam 35-UL (Cocamidopropyl Betaine)	10.0
Mackalene 426 (Isostearamidopropyl Morpholine Lactate)	5.0
Mackester EGDS (Glycol Distearate)	3.5
Mackernium 007 (Polyquaternium-7)	3.0
Paragon III (Phenoxyethanol (and) DMDM Hydantoin (and) Methylparaben (and) Propylparaben)	0.6
Fragrance, Water	qs to 100.0

Appearance: Viscous Lotion

pH: 6.0-6.5

Solids, %: 26.0-28.0

Procedure:

1. Completely disperse Mackernium 007 in water.
2. Add first five components and heat to 75C.
3. Blend slowly and adjust pH to 6.0-6.5 with citric acid.
4. When product is completely homogeneous, add Paragon III.
5. Cool to 50C and add Fragrance.
6. Cool and fill.

Formulation No. 152B

Bath Gelee with Silk Protein Quaternized to Natural Skin Emollients

<u>Raw Materials:</u>	<u>Wt%</u>
Sodium Laureth Sulfate (60%)	20.0
Mackamide CS (Cocamide DEA)	20.0
Mackanate EL (Disodium Laureth Sulfosuccinate)	20.0
Mackpro NSP (Oleyl/Palmityl/Palmitoleamidopropyl/Silk-hydroxypropyl Dimonium Chloride)	4.0
Mackstat DM (DMDM Hydantoin)	qs
Water, Dye, Fragrance	qs to 100.0

Procedure:

1. Add Mackamide CS to Sodium Laureth Sulfate and blend.
2. Add remaining components.
3. Heat to 45C.
4. Blend until homogeneous.
5. Adjust pH to 6.5-7.0 with Citric Acid.
6. Cool to room temperature.

SOURCE; McIntyre Group Ltd.: Personal Care Formulary: Formulas

Fitness Shower Gel
clear, 16.2% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Menthol	0.20
Camphor	0.10
Rosemary oil	0.30
Genapol L-3/Laureth-3	2.00
B 1,2-Propylene glycol	2.00
C Genapol LRO liquid/Sodium Laureth Sulfate	45.00
Genapol AMS/TEA-PEG-3 Cocamide Sulfate	4.00
Water	43.10
Horse chestnut extract	0.50
Dyestuff solution	q.s.
Preservative	q.s.
D Sodium chloride	2.80

Procedure:

1. Dissolve A in B.
 2. Stir the components of C into 1.
 3. If necessary adjust the pH.
 4. Finally adjust the viscosity with D.
- Formula A I/8077

Washing Lotion

clear, with a bacteriostatic effect, 10.4% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Octopirox/Piroctone Olamine	0.20
B Water	10.00
C Genapol AMS/TEA-PEG-3 Cocamide Sulfate	19.00
Fragrance	0.30
Dyestuff solution	q.s.
Preservative	q.s.
D Allantoin	0.20
E Water	59.80
F Genapol L-3/Laureth-3	0.50
Genagen CAB/Cocamidopropyl Betaine	8.00
G Glucamate DOE 120/PEG-120 Methyl Glucose Dioleate	2.00

Procedure:

1. Mix A with B.
 2. Add C to 1 and keep stirring until a clear solution has been obtained.
 3. Dissolve D in E while heating slightly.
 4. Add 3 to 1.
 5. Add the components of F.
 6. If necessary adjust the pH.
 7. Adjust the viscosity with G.
- Formula A II/4024

SOURCE: Hoechst Aktiengesellschaft: Guide Recipes

Foam Bath

with a pearl-lustre effect, 19.9% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Hostapon CT paste/Sodium Methyl Cocoyl Taurate	8.00
B Water	33.20
C Genapol LRO liquid/Sodium Laureth Sulfate	40.00
Medialan LD/Sodium Lauroyl Sarcosinate	10.00
Genapol PGM/Sodium Laureth Sulfate, Glycol Distearate, Cocamide MEA	4.00
Fragrance	0.50
Dyestuff solution	q.s.
Preservative	q.s.
Genapol L-3/Laureth-3	2.00
D Sodium chloride	2.30

Procedure:

1. Dissolve A in B while heating slightly.
 2. Stir the components of C one after another into 1.
 3. If necessary adjust the pH.
 4. Finally adjust the viscosity with D.
- Formula A1/2011

Creamy Foam Bath

with a pearl-lustre effect, 21.7% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Genapol LRO liquid/Sodium Laureth Sulfate	60.00
B Medialan LD/Sodium Lauroyl Sarcosinate	8.00
Fragrance	1.50
Cetiol HE/PEG-7 Glyceryl Cocoate	5.00
Genapol PGL/Glycol Distearate, Cocamide MEA, PPG-4 Deceth-4	5.00
Water	13.00
Dyestuff solution	q.s.
Preservative	q.s.
Genagen CAB/Cocamidopropyl Betaine	6.00
Genapol L-3/Laureth-3	1.00
C Sodium chloride	0.50

Procedure:

1. Stir the components of B one after another into A.
 2. If necessary adjust the pH.
 3. Finally adjust the viscosity with C.
- Formula A I/3025

SOURCE: Hoechst Aktiengesellschaft: Guide Recipes

Foaming Bath Oil

<u>Ingredients/CTFA Name:</u>	<u>Wt%</u>
Light Mineral Oil	20
PEG 400 Monolaurate/PEG-8 Laurate	20
Schercemol Mel-3/Myreth-3 Laurate	8
Schercomid AME-100/Acetamide MEA	8
Schercoquat IALA/Isostearamidopropyl Laurylacetodimonium Chloride	15
Water, Deionized	29

Procedure:

1. Add the first five ingredients (oil phase).
2. With good mixing heat to 30-35C until uniform.
3. Cool to 25C and with fast agitation add the water in small increments; mix until clear.

Specifications:

Appearance @ 25C: Clear slightly viscous liquid
 Color: Colorless
 pH @ 1.0% sol'n (typical): 4.5

Bath Oil Milk

<u>Ingredients/CTFA Name:</u>	<u>Wt%</u>
Schercemol DIA/Diisopropyl Adipate	15
PEG 200 Dilaurate/PEG-4 Dilaurate	15
Schercemol Mel-9/Myreth-9 Laurate	5
Schercomid AME-100/Acetamide MEA	5
Schercoquat ALA/Di-Lauryl Acetyl Dimonium Chloride	15
Water, Deionized	45

Procedure:

1. Add the 1st five ingredients (oil phase).
2. With good mixing heat to 30-35C until uniform.
3. Cool to 25C and with fast agitation add the water in small increments; mix until the emulsion is uniform and smooth.

Specifications:

Appearance @ 25C: White emulsion
 pH @ 1.0% sol'n (typical): 4.5
 Viscosity @ 25C (typical): 3,000 cps
 Formula SO-015

SOURCE: Scher Chemicals, Inc.: Formulary

High Fragrance Bubble Bath

<u>Ingredient:</u>	<u>Wt%</u>
Water	23.2
Disodium EDTA	0.2
Sodium Laureth-2 Sulfate (26%)	69.0
Promidium CC (PPG-1 Hydroxyethyl Caprylamide)	2.5
Promidium SY (PPG-2 Hydroxyethyl Soyamide)	2.5
Fragrance	2.5
Citric Acid	0.1

Procedure:

To the water, add disodium EDTA and sodium laureth-2 sulfate with stirring. Premix Promidium CC, Promidium SY and fragrance. Add to sodium laureth-2 sulfate mixture. Add color, and preservative. Adjust the pH to 6.0 with citric acid.

Formulation Properties:

Appearance: Clear yellow liquid

Activity (%): 22.5

Viscosity (cP) @ 25C: 1400

Krafft Point: 3C

Note: Add sodium chloride if a higher viscosity is desired.

SOURCE: Mona Industries, Inc.: Formula F-861

Moisturizing Three Layer Bath Oil

A three-layer bath oil containing Panalane L-14E which is an effective moisturizer and skin emollient.

<u>Sequence:</u>	<u>Raw Material/INCI Name:</u>	<u>Wt%</u>
1	Cetiol HE/PEG-7 Glyceryl Cocoate	32.50
2	Panalane L-14E/Hydrogenated Polyisobutene	35.00
3	Glycerin	32.50

Procedure:

1. At room temperature, weigh Sequence #1 ingredient and pour into appropriate container.
2. Slowly add Sequence #2 into container on top of Sequence #1.
3. Slowly add Sequence #3 to the above two ingredients.

Note:

After the product has been shaken to achieve maximum benefits, it will take approximately 5-10 minutes to return to three-layer oil.

SOURCE: Lipo Chemicals Inc.: Formula No. 1082

Milk Bath

This low viscosity, milky product is designed to be added to a bathtub of water (2 fl. oz.). It provides a non-greasy, soft, silky feel to the skin.

<u>Ingredient/Function:</u>	<u>Wt%</u>
Part A:	
2-Phenoxyethanol/Preservative	0.2
DMDM Hydantoin/Preservative	0.2
Deionized Water/Diluent	70.6
Part B:	
Dimethicone (and) Laureth-4 (and) Laureth-23(SM2169)(1)/ Smooth, silky feel	15.0
Part C:	
Phenyl Trimethicone(SF1550)(1)/Emollient with non-greasy feel	7.5
Glycerin/Humectant	3.0
Part D:	
Fragrance	q.s.
PEG-20 Almond Glycerides(2)/Emollient/Solubilizer	3.5

Procedure:

1. Dissolve Part A with moderate propeller agitation.
2. Add Part B and continue stirring for 10-15 minutes.
3. Combine Part C. Add to batch and continue stirring for 15-20 minutes.
4. Combine Part D and add to batch. Continue mixing with moderate propeller agitation for 15-20 minutes.

Suppliers:

- (1) GE Silicones
 (2) Croda, Inc.
 Formula SP 112

After-Bath Oil

This oil, applied after bathing, gives the skin a soft, silky feel. SF1550 acts as a non-greasy emollient, while SF1204 promotes a quick dry time without a greasy feel.

<u>Ingredient/Function:</u>	<u>Wt%</u>
Phenyl Trimethicone(SF1550)(1)/Non-oily emollient	10.0
Mineral Oil (light)/Emollient	32.0
Cyclomethicone(SF1204)(1)/Quick dry/Non-oily feel	56.0
Fragrance(2)	2.0

Procedure:

1. Mix together SF1550 and SF1204, stirring until uniform.
2. Add mineral oil with good mixing.
3. When homogeneous, slowly add fragrance and continue stirring 15 minutes.

Trade Names/Suppliers:

- (1) GE Silicones
 (2) Fragrance J6-712-B, Bell Flavors and Fragrances
 Formula SP 113

SOURCE: GE Silicones: Personal Care Formulary: Formulations

Moisturizing Body Wash

A liquid body wash product which is designed to cleanse and moisturize the skin. SM2169 is a 60% nonionic emulsion of a 60,000 ctsks dimethicone fluid. It provides the smooth, silky, feel of a high molecular silicone in an easy-to-use aqueous delivery system.

<u>Ingredient/Function:</u>	<u>Wt%</u>
Part A:	
Deionized Water/Diluent	51.45
Disodium EDTA/Chelating agent	0.05
Carbomer(1)/Thickener	1.00
Part B:	
Propylene Glycol/Humectant	1.00
Glycerin (96%)/Humectant	2.00
Part C:	
Sodium Laureth Sulfate (28-30%)/Surfactant	16.00
Disodium Dimethicone Copolyol Sulfosuccinate(30%)(2)/ Surfactant	15.00
Polysorbate-20/Emulsifier	1.00
Dimethicone (and) Laureth-4 (and) Laureth-23(SM2169)(3)/ Conditioning	5.00
Cocamidopropyl Betaine/Surfactant	3.00
Part D:	
Polyquaternium-39(4)/Conditioning	3.00
DMDM Hydantoin (and) Iodopropynyl Butylcarbamate(5)/ Preservative	0.15
Fragrance(6)	0.25
Part E:	
Triethanolamine(99%)/pH adjustment	1.10

Procedure:

1. Meter water of Part A into appropriate vessel. Add EDTA and mix until dissolved. With moderate propeller agitation, add the carbomer and mix for 20 minutes.
2. Add ingredients of Part B to Part A with moderate propeller agitation.
3. Add Part C to Part AB in order listed with moderate propeller agitation. Mix 20-30 minutes with moderate agitation.
4. Add Part D to batch in order listed. Mix with moderate agitation for 20 minutes.
5. Adjust batch to pH 5.5 with part E.

Trade Names/Suppliers:

- | | |
|-------------------|-----------------------|
| (1) Carbopol 2020 | (2) Mackanate DC-30 |
| (3) GE Silicones | (4) Merquat Plus 3330 |
| (5) Glydant Plus | (6) Fragrance TC-726 |

SOURCE: GE Silicones: Personal Care Formulary: Formula SP 111

Moisturizing Shower Gel

Starting formulation for a high-foaming shower gel with moisturizing properties.

<u>Ingredients:</u>	<u>Wt%</u>
Sulfochem SLS	14.00
Sulfochem ES-2	24.00
Chembetaine C	6.50
Chemoxide CAW	5.50
Citric acid	0.10
Water, soft	47.30
Amidex CME	1.80
Preservatives	q.s.
NaCl	0.50
Fragrance, color, etc.	q.s.

Blending Procedure:

At ambient temperature, charge mixing vessel with Sodium Lauryl Sulfate, Sodium Laureth Sulfate, and water. Add Cocamidopropyl Betaine, Cocamidopropylamine Oxide, and citric acid and mix until homogeneous. When mixture is homogeneous, heat to 70C and add Amidex CME, preservatives, color, fragrance, and NaCl. Adjust pH to 6.0-6.5 with citric acid. Adjust viscosity to 15,000 cps with NaCl.
Formulation No. F1004

Silky Shower Gel

Prototype formula for a shower gel that leaves skin with a soft, silky feel.

<u>Ingredients:</u>	<u>Wt%</u>
Sulfochem ALS	37.00
Chembetaine S	3.50
Chembetaine OL	1.25
Citric acid	0.12
Water, soft	q.s.
Amidex CME	1.70
Quaternium 15	0.10
Preservatives	q.s.
NaCl	0.50

Blending Procedure:

At ambient temperature, charge mixing vessel with Sulfochem ALS and water. Add Chembetaine S, Chembetaine OL, and citric acid until homogeneous. When mixture is homogeneous, heat to 70C and add Amidex CME and NaCl. Adjust pH to 5.50-6.00 with citric acid. Adjust viscosity to 16,000 cps with NaCl.
Formulation No. F1003

SOURCE: Chemron Corp.: Suggested Formulations

Oil Foam Bath

<u>Raw Materials:</u>	<u>Wt%</u>
A. Marlinat 242/28 (Sodium Laureth Sulfate)	28
Ampholyt JB 130 (Cocamidopropyl Betaine)	7
Marlamid DF 1218 (Cocamide DEA)	8
B. Softigen 767	37
Miglyol 840 (Propylene Glycol Dicaprylate/Dicaprate)	20
Colour	q.s.
Fragrance	q.s.

Preparation:

A is mixed, heated up to approx. 75C and stirred cold to about 30C. B is subsequently admixed.

Mild Foam Bath

<u>Raw Materials:</u>	<u>Wt%</u>
A. Marlinat CM 105 (Sodium Laureth-11 Carboxylate)	25
Ampholyt JB 130 (Cocamidopropyl Betaine)	25
Softigen 767	5
Elfacos GT 282 S (Hydrogenated Talloweth-60 Myristol Glycol)	7
Colour	q.s.
Preservative	q.s.
Water ad	100
B. Fragrance	q.s.

Preparation:

A is mixed and heated to approx. 75C. Then the blend is stirred cold down to approx. 30C. B is gradually admixed.

Oil Bath Slightly Foaming with Good Refatting Property

<u>Raw Materials:</u>	<u>Wt%</u>
A. Softigen 767 (PEG-6 Caprylic/Capric Glycerides)	21.5
Miglyol 812 (Caprylic/Capric Triglyceride)	27
Imwitor 375	22.5
Mineral Oil	26
Fragrance	3

Preparation:

All components are put together at about 40C.

SOURCE: Huls Aktiengesellschaft: Suggested Formulations

Pearlescent Bath Lotion

<u>Raw Materials:</u>	<u>Wt%</u>
Sodium Lauryl Sulfate (30%)	40.0
Mackanate EL (Disodium Laureth Sulfosuccinate)	30.0
Mackam 35HP (Cocamidopropyl Betaine)	5.0
Mackester SP (Glycol Stearate (and) Stearamide MEA)	1.5
Sodium Chloride	1.0
Mackstat DM (DMDM Hydantoin)	qs
Water, Dye, Fragrance	qs to 100.0

Procedure:

1. Add first four components to water.
2. Heat to 70C.
3. Blend until Mackester SP is completely dispersed.
4. Add Sodium Chloride and cool to 45C.
5. Add Mackstat DM, Dye, and Fragrance.
6. Cool to room temperature.

SOURCE: McIntyre Group Ltd.: Personal Care Formulary: Formulas

Bath Oil

<u>INCI Name/Trade Name:</u>	<u>Wt%</u>
Phase A:	
Isopropyl Myristate/Emerset 2314	25.00
Octyldodecanol/Eutanol G	20.00
Caprylic/Capric Triglyceride/Myritol 318	38.00
Laureth-3/Dehydol LS3	10.00
Fragrance/Haarman & Reimer	4.90
Silica/Aerosil 200	2.00
Pearl Pigment	0.05-0.10

Procedure:

Aerosil 200 is added with stirring to a mixture of Isopropyl Myristate, Eutanol G, Myritol 318, Dehydol LS 3, and fragrance, then homogenized e.g. in an Ultra Turrax. Then the pearl pigment and the dyestuff solution are added with stirring.

Note:

- *Viscosity 3600 mPas (Brookfield LV3, 6 rpm @ 20C)
- *Recommended Pearl Pigments-All Sparkle pigments, e.g. Timiron Starlight Colors, Colorona Bronze Sparkle, Timiron MP-149

SOURCE: Rona/Em Industries, Inc.: Formulation EM2-49

Shower Cream
White, creamy

<u>Ingredients:</u>	<u>Wt%</u>
A Teginacid/Glyceryl Stearate, Ceteareth-20	8.00
Adol 66/Isostearyl Alcohol	5.00
Isopropyl Myristate	6.00
Eutanol G/Octyldodecanol	4.00
 B Texapon N 40/Sodium Laureth Sulfate	 10.00
Genapol TSM/PEG-3 Distearate, Sodium Laureth Sulfate	5.00
Glycerine	5.50
Water	46.50
 C Wacker Emulsion E 32/Stearyl Methicone, Trideceth-10	 10.00
Preservative, fragrances, pigments	q.s.
 Heat A and B each to 60-70C, mix B into A. Add C at approx. 35C.	
Formulation 1113/2 AH	

Shower Gel
Colorless, clear, high viscosity

<u>Ingredients:</u>	<u>Wt%</u>
Genapol LRO/Sodium Laureth Sulfate	35.00
Dehyton AB 30/Coco-Betaine	10.00
Aethoxal B/PPG-5 Laureth-5	5.00
Wacker-Belsil DMC 6038/Dimethicone Copolyol	5.00
Comperlan KD/Cocamide DEA	3.00
Water	42.00
Preservative, fragrances, pigments	q.s.
 Mix all ingredients well.	
Formulation 895 AH	

SOURCE: Wacker-Chemie GmbH: Formulas for Beauty

Shower Gel
clear, 15.4% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Genapol LRO liquid/Sodium Laureth Sulfate	35.00
B Genapol SBE/Disodium Laureth Sulfosuccinate	8.00
Fragrance	0.50
Water	52.00
Genapol L-3/Laureth-3	3.00
Dyestuff solution	q.s.
Preservative	q.s.
C Sodium chloride	1.50

Procedure:

1. Stir the components of B one after another into A.
2. If necessary adjust the pH.
3. Finally adjust the viscosity with C.

Formula A I/8069

Shower Gel
with a pearl-lustre effect, 16.2% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Genapol LRO liquid/Sodium Laureth Sulfate	40.00
B Hostapon KCG/Sodium Cocoyl Glutamate	6.00
Fragrance	1.00
Genapol L-3/Laureth-3	1.50
Cetiol HE/PEG-7 Glyceryl Cocoate	5.00
Genapol PGL/Glycol Distearate, Cocamide MEA PPG-4	
Deceth-4	4.00
Dyestuff solution	q.s.
Preservative	q.s.
Water	34.20
Genagen CAB 818/Cocamidopropyl Betaine	6.00
C Sodium chloride	2.30

Procedure:

1. Stir the components of B one after another into A.
2. If necessary adjust the pH.
3. Finally adjust the viscosity with C.

Formula A I/8072

SOURCE: Hoechst Aktiengesellschaft: Guide Recipes

Shower Gel

with a silk-lustre effect, 17.9% active ingredient

Recipe:

	<u>Wt%</u>
A Genapol LRO liquid/Sodium Laureth Sulfate	40.00
B Genapol AMS/TEA-PEG-3 Cocamide Sulfate	9.75
Genapol TSM/PEG-3 Distearate, Sodium Laureth Sulfate	4.00
Fragrance	0.50
Water	35.40
Dyestuff solution	q.s.
Preservative	q.s.
Genagen CAB/Cocamidopropyl Betaine	8.00
C Sodium chloride	2.35

Procedure:

1. Stir the components of B one after another into A.
2. If necessary adjust the pH.
3. Finally adjust the viscosity with C.

Formula A I/8073

Shower Gel

clear, 17.6% active ingredient

Recipe:

	<u>Wt%</u>
A Genapol LRO liquid/Sodium Laureth Sulfate	35.00
B Genapol SBE/Disodium Laureth Sulfosuccinate	7.50
Hostapon KCG/Sodium Cocoyl Glutamate	5.00
Fragrance	0.50
C Allantoin	0.40
D Water	40.85
E Genagen CAB/Cocamidopropyl Betaine	8.00
Dyestuff solution	q.s.
Preservative	q.s.
Genapol L-3/Laureth-3	1.50
F Sodium chloride	1.25

Procedure:

1. Stir the components of B into A.
2. Dissolve C in D while heating slightly.
3. Stir 2 into 1.
4. Stir the components of E one after another into 1.
5. If necessary adjust the pH.
6. Finally adjust the viscosity with F.

Formula A I/8074

SOURCE: Hoechst Aktiengesellschaft: Guide Recipes

Shower Gel

with a silk-lustre effect, 14.9% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Hostapon SCID/Sodium Cocoyl Isethionate	6.30
B Water	52.05
C Genapol ZRO liquid/Sodium Laureth Sulfate	30.00
Genapol TSM/PEG-3 Distearate, Sodium Laureth Sulfate	4.00
Fragrance	0.50
Dyestuff solution	q.s.
Preservative	q.s.
Genagen CAB/Cocamidopropyl Betaine	6.00
D Sodium chloride	1.15

Procedure:

1. Dissolve A in B while heating to 60C and cool down.
 2. At 30C stir the components of C into 1.
 3. If necessary adjust the pH.
 4. Finally adjust the viscosity with D.
- Formula A I/8075

Shower Gel

with a silk-lustre effect, 19.9% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Genapol LRO liquid/Sodium Laureth Sulfate	40.00
Medialan LD/Sodium Lauroyl Sarcosinate	13.00
Genapol TSM/PEG-3 Distearate, Sodium Laureth Sulfate	4.00
Fragrance	0.50
Water	29.75
Dyestuff solution	q.s.
Preservative	q.s.
Genagen CAB/Cocamidopropyl Betaine	8.00
Genapol L-3/Laureth-3	2.00
C Sodium chloride	2.75

Procedure:

1. Stir the components of B one after another into A.
 2. If necessary adjust the pH.
 3. Finally adjust the viscosity with C.
- Formula A I/8079

SOURCE: Hoechst Aktiengesellschaft: Guide Recipes

Shower Gel with Avocado ExfoliantsStage Materials/INCI Listing

	<u>Wt%</u>
Stage A:	
1 Water, Pure	64.100
2 Carbopol ETD 2020/Acrylates/C10-30 Alkyl Acrylate Crosspolymer	1.000
Stage B:	
3 EDTA, Disodium Salt/Disodium EDTA	0.100
4 Glycerine BP	2.000
5 Ammonium Lauryl Sulfate 30% Active	15.000
6 Disodium Laureth Sulfosuccinate 40%	10.000
7 Cocamidopropyl Betaine	3.000
8 Fragrance	0.500
9 Cosflor Awapuhi HGS	1.000
Stage C:	
10 Add preservative(s) & colour to suit	0.500
Stage D:	
11 Triethanolamine 99%	0.800
12 AEC Avocado Prills/Persea Gratissima (Avocado Oil)	2.000

Mixing Instructions:

Avocado Prills are smooth wax-like beads available in various colours which act as a gentle exfoliant. They are suspended in the shower gel by the high yield strength of the Carbopol ETD 2020.

Stage A: Measure out the water and disperse the Carbopol ETD 2020 in this with moderate agitation until homogeneous.

Stage B: Add each item in turn to Stage A with careful mixing.

Stage C: Add preservatives and colour to suit.

Stage D: Adjust pH to 6.0-6.5 by careful addition of TEA and then slowly mix in the Avocado Prills.

SOURCE: A&E Connock Ltd.: Formula Ref.: 1257*0

Shower Gel with Jojoba Wax ExfoliantsStage Materials/INCI Listing:

	<u>Wt%</u>
Stage A:	
1 Water, Pure	65.100
2 Carbopol ETD 2020/Acrylates/C10-30 Alkyl Acrylate Crosspolymer	1.000
Stage B:	
3 EDTA, Disodium Salt/Disodium EDTA	0.100
4 Glycerine BP	2.000
5 Ammonium Lauryl Sulfate 30% Active	10.000
6 Disodium Laureth Sulfosuccinate 40%	12.000
7 Cocamidopropyl Betaine	5.000
8 Fragrance	0.500
9 Cosflor Tea Tree HGS	1.000
Stage C:	
10 Add preservative & colour to suit	0.500
Stage D:	
11 Triethanolamine 99%	0.800
12 AEC Jojoba Wax Prills	2.000

Mixing Instructions:

Jojoba Wax Prills are smooth wax-like beads available in various colours which act as a gentle exfoliant. They are suspended in the shower gel by the high yield strength in the Carbopol ETD 2020.

Stage A: Measure out the water and disperse the Carbopol ETD 2020 in this moderate agitation until homogeneous.

Stage B: Add each item in turn to Stage A with careful mixing.

Stage C: Add preservatives and color to suit.

Stage D: Adjust pH to 6.0-6.5 by careful addition of TEA and then slowly mix in the Jojoba Wax Prills.

SOURCE: A&E Connock Ltd.: Formula Ref. 1258*0

Transparent Bath and Shower Bar

<u>Raw Materials:</u>	<u>Wt%</u>
Propylene Glycol	4.0
Ceteareth-27	16.0
Mackamide LMD (Lauramide DEA)	16.0
Mackam CB (Coco Betaine)	10.0
Mackol 70NS (Sodium Laureth Sulfate)	20.0
Poloxamer 407	4.0
Glycerin (99%)	14.0
Urea	6.0
Stearic Acid	8.0
50% Sodium Hydroxide	2.0
Fragrance	qs

This formulation will produce a clear, high foaming cleansing bar. The hardness of the bar can be varied with the concentration of the sodium stearate, which is made in situ using stearic acid and 50% sodium hydroxide. The bar is non-tacky and releases from its mold when cooled.

Procedure:

1. Blend all ingredients but the Urea, Stearic Acid, and 50% Sodium Hydroxide.
2. Heat and stir until uniform at 60-65C.
3. Add Urea and stir until clear at 60-65C.
4. Add Stearic Acid, stir until clear while heating to 75-80C.
5. Add 50% Sodium Hydroxide at 75-80C.
6. Stir in Fragrance at 75-80C; package.
Formulation No. 2

Bath Gelee

<u>Raw Materials:</u>	<u>Wt%</u>
Sodium Laureth Sulfate (60%)	34.6
Mackamide C (Cocamide DEA)	20.0
Mackanate EL (Disodium Laureth Sulfosuccinate)	45.0
Mackstat DM (DMDM Hydantoin)	qs
Dye, Fragrance	qs to 100.0

Procedure:

1. Add components in order.
2. Heat to 45C.
3. Blend until homogeneous.
4. Adjust pH to 6.0-6.5 with Lactic Acid.
5. Add Dye and Fragrance.
6. Cool to room temperature.

SOURCE: McIntyre Group Ltd.: Personal Care Formulary Formulations

Transparent Bath and Shower Bar

<u>Raw Materials:</u>	<u>Wt%</u>
Sodium Stearate	22.0
Propylene Glycol	5.0
Glycerine	15.0
Sorbeth-40	11.0
Mackamide L-10 (Lauramide DEA)	20.0
Sodium Cocoyl Sarcosinate	10.0
Urea	3.0
Water	4.0
Mackanate OP (Disodium Oleamido MIPA Sulfosuccinate)	10.0

Procedure:

1. Mix all ingredients except Sodium Stearate.
 2. Heat to 50-60C with slow agitation.
 3. Add Sodium Stearate slowly in small increments; heat to 85C; stir to clear.
 4. Stop agitation and allow air to rise.
 5. Pour into molds, cool and remove.
- Formulation No. 1

Shower Soap

<u>Raw Materials:</u>	<u>Wt%</u>
Mackanate EL (Disodium Laureth Sulfosuccinate)	20.0
Mackanate OM (Disodium Oleamido MEA Sulfosuccinate)	15.0
Sodium Lauryl Sulfate (30%)	10.0
Mackamide LLM (Lauramide DEA)	6.0
Mackpearl 202 (Pearling Agent)	3.0
Mackernium 007 (Polyquaternium 7)	2.5
Paragon III (Phenoxyethanol (and) DMDM Hydantoin (and) Methylparaben (and) Propylparaben)	qs
Water, Dye, Fragrance	qs to 100.0

Procedure:

1. Disperse Mackernium 007 in water.
2. Add remaining components.
3. Heat to 40C.
4. Adjust pH to 6.0 with Citric Acid.
5. Adjust viscosity to 10,000 cps with Sodium Chloride.
6. Cool to room temperature.

SOURCE: McIntyre Group Ltd.: Personal Care Formulary: Formulas

Ultra Mild Body Wash for Sensitive Skin

<u>Raw Materials:</u>	<u>Wt%</u>
Mackam 2CY-75 (Disodium Capryloamphodiacetate)	14.0
Mackam 2S (Disodium Soyamphodiacetate)	4.0
Mackanate LO (Disodium Lauryl Sulfosuccinate)	32.0
Mackam 35-UL (Cocamidopropyl Betaine)	10.0
Mackalene 426 (Isostearamidopropyl Morpholine Lactate)	3.0
Mackester EGDS (Glycol Distearate)	3.5
Mackernium 007 (Polyquaternium 7)	1.0
Sodium Chloride	qs
Paragon III (Phenoxyethanol (and) DMDM Hydantoin (and) Methylparaben (and) Propylparaben)	qs
Water, Fragrance	qs to 100.0
Appearance: Viscous Lotion	
pH: 6.0-6.5	
Solids, %: 24.0-27.0	

Procedure:

1. Completely disperse Mackernium 007 in water.
2. Add first six components and heat to 75C.
3. Blend slowly and adjust pH to 6.0-6.5 with Citric Acid.
4. When product is completely homogeneous, add Paragon III.
5. Cool to 50C and add Fragrance.
6. Add Sodium Chloride to adjust viscosity.
7. Cool and fill.

Ultra Mild Body Wash for Normal Skin

<u>Raw Materials:</u>	<u>Wt%</u>
Mackam HPC-32 (Sodium Cocoamphoacetate)	14.0
Mackanate LO (Disodium Lauryl Sulfosuccinate)	32.0
Mackam 35-UL (Cocamidopropyl Betaine)	10.0
Mackalene 426 (Isostearamidopropyl Morpholine Lactate)	3.0
Mackester EGDS (Glycol Distearate)	3.5
Mackernium 007 (Polyquaternium-7)	1.0
Sodium Chloride	qs
Paragon III (Phenoxyethanol (and) DMDM Hydantoin (and) Methylparaben (and) Propylparaben)	qs
Fragrance, Water	qs to 100.0
Appearance: Viscous Lotion	
pH: 6.0-6.5	
Solids, %: 24.0-27.0	

Procedure:

1. Completely disperse Mackernium 007 in water.
2. Add first five components and heat to 75C.
3. Blend slowly and adjust pH to 6.0-6.5 with Citric Acid.
4. When product is completely homogeneous, add Paragon III.
5. Cool to 50C and add Fragrance.
6. Add Sodium Chloride to adjust viscosity.
7. Cool and fill.

SOURCE: McIntyre Group Ltd.: Personal Care Formulary: Formulas

Ultra Mild Body Wash for Dry Skin

<u>Raw Materials:</u>	<u>Wt%</u>
Mackam HPC-32 (Sodium Cocoamphoacetate)	14.0
Mackanate LO (Disodium Lauryl Sulfosuccinate)	30.0
Mackam 35-UL (Cocamidopropyl Betaine)	10.0
Mackalene 426 (Isostearamidopropyl Morpholine Lactate)	6.0
Mackester EGDS (Glycol Distearate)	3.5
Mackernium 007 (Polyquaternium-7)	3.0
Sodium Chloride	qs
Paragon III (Phenoxyethanol (and) DMDM Hydantoin (and) Methylparaben (and) Propylparaben)	qs
Fragrance, Water	qs to 100.0

Appearance: Viscous Lotion

pH: 6.0-6.5

Solids, %: 24.0-27.0

Procedure:

1. Completely disperse Mackernium 007 in water.
2. Add first five components and heat to 75C.
3. Blend slowly and adjust pH to 6.0-6.5 with Citric Acid.
4. When product is completely homogeneous, add Paragon III.
5. Cool to 50C and add Fragrance.
6. Add Sodium Chloride to adjust viscosity.
7. Cool and fill.

Mild Bubble Bath

<u>Raw Materials:</u>	<u>Wt%</u>
Mackadet BBC (Disodium Laureth Sulfosuccinate (and) Sodium Laureth Sulfate)	20.0
Hydroxyethylcellulose	1.0
Paragon II (Propylene Glycol (and) DMDM Hydantoin (and) Methylparaben (and) Propylparaben)	qs
Water, Dye, Fragrance	qs to 100.0

This bubble bath will be a flowable liquid with a pH of 6.0-7.0 and a concentration of approximately 10%.

Procedure:

1. Completely disperse the Hydroxyethylcellulose in cold water.
2. Heat to 40C.
3. Add Mackadet BBC and blend until clear.
4. Add Citric Acid, if necessary, to adjust pH.
5. Add Paragon II, Dye, and Fragrance.
6. Cool and fill.

SOURCE: McIntyre Group Ltd.: Personal Care Formulary: Formulae

2 in 1 Shower Gel
17.2% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Allantoin	0.40
Polymer JR 400/Polyquaternium-10	0.50
Hostapon SCID/Sodium Cocoyl Isethionate	4.00
B Water	45.90
C Genapol LRO liquid/Sodium Laureth Sulfate	30.00
Hostapon KCG/Sodium Cocoyl Glutamate	5.00
Fragrance	0.50
Cetiol HE/PEG-7 Glyceryl Cocoate	2.00
Genapol TSM/PEG-3 Distearate, Sodium Laureth Sulfate	4.00
Dyestuff solution	q.s.
Preservative	q.s.
Genagen CAB/Cocamidopropyl Betaine	5.00
Genapol L-3/Laureth-3	2.00
D Sodium chloride	0.70

Procedure:

1. Dissolve the components of A by stirring into B and heating to approx. 60C.
 2. Cool down and add the components of C at approx. 35C while stirring.
 3. If necessary adjust the pH.
 4. Finally adjust the viscosity with D.
- Formula A I/8061

Shower Gel

with a pearl-lustre effect, 19.8% active ingredient

<u>Recipe:</u>	<u>Wt%</u>
A Hostapon CT paste/Sodium Methyl Cocoyl Taurate	6.00
Hostapon SCID/Sodium Cocoyl Isethionate	2.70
B Water	41.40
C Genapol LRO liquid/Sodium Laureth Sulfate	40.00
Genapol PGM/Sodium Laureth Sulfate, Glycol Distearate,	
Cocamide MEA	6.00
Fragrance	1.00
Dyestuff solution	q.s.
Preservative	q.s.
Genapol L-3/Laureth-3	3.00
D Sodium chloride	0.40

Procedure:

1. Dissolve the components of A by stirring into B and warming to approx. 60C.
 2. Cool down and add the components of C at approx. 35C while stirring.
 3. If necessary adjust the pH.
 4. Finally adjust the viscosity with D.
- Formula A I/8078

SOURCE: Hoechst Aktiengesellschaft: Guide Recipes