

Figure 1A

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μm	% < 0.20 μm	% < 0.30 μm	% < 0.5 μm	% < 1.0 μm	% > 2.0 μm		
A	IND	1.20	12	LAC	8.80	88							0.223	45	61	71	77	89		
B	IND	1.20	12	LAC	8.70	87		SPS	0.1	1			0.215	47	64	84	83	93		
C	IND	1.20	12	LAC	8.70	87		SDS	0.1	1			0.189	53	73	88	95	99		
D	IND	1.20	12	LAC	8.70	87		SOS	0.1	1			0.203	49	69	84	92	97		
E	IND	1.20	12	LAC	8.70	87		B700	0.1	1			0.167	60	80	93	97	99		
F	IND	1.20	12	LAC	8.70	87		B76	0.1	1			0.192	52	72	89	96	99		
G	IND	1.20	12	LAC	8.70	87		SDC	0.1	1			0.191	52	67	77	83	93		
H	IND	1.20	12	LAC	8.70	87		SNS	0.1	1			0.225	44	63	79	88	96		
I	IND	1.20	12	LAC	8.70	87		LEC	0.1	1			0.230	44	61	75	85	95		
J	IND	0.5	10	LAC	4.50	90							0.237	44	57	65	73	85		
K	IND	0.5	10	LAC	4.45	89		P40S	0.05	1			0.169	58	72	80	89	97		
L	IND	0.5	10	LAC	4.45	89		DS	0.05	1			0.249	42	56	68	84	98		
M	IND	0.5	10	LAC	4.45	89		AS	0.05	1			0.190	52	67	76	84	92		
N	IND	1.0	20	LAC	3.95	79		SDS	0.05	1			0.435	24	38	53	67	83		
O	IND	1.0	20					SDS	4.00	80			2.612	0	0	0	6	34		
P	IND	4.95	99					SDS	0.05	1			1094	0	0	0	0	2		
Q	IND	1.0	20	LAC	4.00	80							5.128	0	0	0	0	8		
R	DIC	1.0	20	LAC	3.95	79		SDS	0.05	1			0.153	66	84	95	98	99		
S	DIC	1.0	20					SDS	4.00	80			3.173	0	0	0	3	24		

Figure 1B

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μm	% < 0.20 μm	% < 0.30 μm	% < 0.5 μm	% < 1.0 μm	% > 2.0 μm		
T	DIC	4.95	99				SDS	0.05	1				30	117	0	0	0	1	4		
U	DIC	1.00	20	LAC	4.00	80							30	0.178	56	74	86	92	97		
V	DIC	2.00	20	MAN	8.00	80							30	0.2	50	69	84	91	97		
W	DIC	2.00	20	MAN	7.90	79	SDS	0.1	1				30	0.201	50	69	83	91	97		
X	DIC	2.00	20	MAN	7.90	79	SOS	0.1	1				30	0.195	51	71	85	92	97		
Y	NAA	1.75	35	LAC	3.2	65							20	2.9	18	23	25	26	38		
Z	NAA	1.75	35	LAC	3.25	64	P40S	0.05	1				20	0.373	33	45	56	70	87		
AA	NAA	1.75	35	LAC	3.25	64	SDS	0.05	1				20	0.293	38	50	60	65	75		
AB	NAA	4.0	40	LAC	5.9	59	P40S	0.1	1				120	0.285	37	52	66	75	82		
AC	NAA	4.0	40	LAC	6.0	60							120	6.1	0	0	0	0	8		
AD	NAA	1.40	35	MAN	2.60	65							20	0.171	58	73	82	86	88		
AE	NAA	1.40	35	MAN	2.52	63	SDS	0.08	2				20	0.131	76	90	95	96	98		
AF	NAA	1.2	30	MAN	2.8	70							20	0.208	48	64	75	79	84		
AG	NAA	1.2	30	MAN	2.76	69.0	SDS	0	1.0				20	0.173	58	75	86	91	96		
AH	NAA	1.2	30.0	LAC	2.8	70.0							20	0.396	33	44	53	58	70		
AI	NAA	1.2	30.0	TCD	2.8	70.0							20	3.1	18	24	27	27	37		
AJ	NAA	1.2	30.0	CAC	2.8	70.0							20	28	3	4	5	6	10		
AK	NAA	1	25.0	LAA	3	75.0							20	1.07	31	41	46	49	67		
AL	NAA	1	25.0	XYL	3	75.0							20	0.18	57	75	87	92	95		

Figure 1C

Sample No.	Active material			Primary Matrix		Surfactant #1			Surfactant #2			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μ m	% < 0.20 μ m	% > 0.30 μ m	% > 0.5 μ m	% > 1.0 μ m	% > 2.0 μ m		
AM	NAA 1	25.0		MAA	3	75.0						20	0.153	66	85	96	98	99		
AN	NAA 1	25.0		TCD	3	75.0						20	0.331	35	48	57	62	72		
AO	HAL 1	10.0		LAC	9	90.0						40	2.123	0	0	0	0	5		
AP	HAL 1	10.0		LAC	8.9	89.0	LEC	0.1	1.0			40	0.135	74	90	97	98	99		
AQ	MET 1	10.0		LAC	9	90.0						40	4.727	0	0	0	0	4		
AR	MET 1	10.0		LAC	8.9	89.0	SDS	0.1	1.0			40	0.129	80	93	96	97	98		
AS	TRI 1	10.0		LAC	9	90.0						40	2.622	0	0	0	0	25		
AT	TRI 1	10.0		LAC	8.9	89.0	B700	0.1	1.0			40	0.128	82	96	98	98	99		
AU	SUL 1	10.0		LAC	9	90.0						40	0.388	27	42	56	69	86		
AV	SUL 1	10.0		LAC	8.9	89.0	SDS	0.1	1.0			40	0.455	6	26	55	78	96		
AW	MAN 1	10.0		LAC	9	90.0						40	0.198	50	71	88	97	97		
AX	MAN 1	10.0		LAC	8.9	89.0	B700	0.1	1.0			40	0.17	60	82	96	100	100		
AY	MAN 1	10.0		LAC	8.9	89.0	SDS	0.1	1.0			40	0.171	60	82	97	100	100		
AZ	MAN 1	10.0		LAC	8.9	89.0	LEC	0.1	1.0			40	0.181	56	78	95	100	100		
BA	MAN 2	20.0		LAC	7.9	79.0	SDS	0.1	1.0			40	0.212	47	68	86	96	98		
BB	MAN 3	30.0		LAC	6.9	69.0	SDS	0.1	1.0			40	0.258	36	58	81	94	97		
BC	MTX 1.5	30.0		LAC	3.5	69.0	P407	0.1	1.0			60	0.16	63	77	84	89	93	2	
BD	MTX 1.5	30.0		LAC	3.5	70.0						60	0.28	40	52	59	59	71	2	
BE	MTX 2.5	50.0		LAC	2.35	47.0	SDS	0.8	2.0	P407	0.1	2	0.148	67	83	92	98	99	2	

Figure 1D

Sample No.	Active material			Primary Matrix		Surfactant #1			Surfactant #2			Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μ m	% < 0.20 μ m	% > 0.30 μ m	% < 0.5 μ m	% < 1.0 μ m	% < 2.0 μ m	
BF NAA 1	25	30	75	MAN	3	75							0.181	55	74	87	94	97	
BG NAA 1	25	30	75	XYL	3	75							0.177	56	74	85	91	95	
BH NAS 1.25	25	30	75	TA	3.75	75							0.311	37	49	59	64	75	
BI NAS 1.25	25	30	74	TA	3.75	74	P40S	0.1	1				0.303	36	50	62	77	89	
BJ DIC 3	30	31	69	LAC	6.9	69	SDS	0.1	1				0.202	49	69	83	88	92	
BK 2,4D 1	20		80	LAC	4	80							1.205	17	23	29	43	72	93
BL 2,4D 1	20		79	LAC	3.95	79	SDA	0.05	1				0.473	20	33	52	75	82	91
BM 2,4D 1	20		79	LAC	3.95	79	T3785	0.05	1				0.414	24	38	57	78	94	93
BN 2,4D 1	20		79	LAC	3.95	79	D920	0.05	1				0.402	26	40	57	78	91	93
BO 2,4D 1	20		79	LAC	3.95	79	SDS	0.05	1				0.276	36	54	74	92	96	1
BP 2,4D 1	20		79	LAC	3.95	79	B700	0.05	1				0.269	38	54	69	86	95	92
BQ 2,4D 1	20		79	LAC	3.95	79	K1251	0.05	1				0.252	41	56	71	89	96	91
BR 2,4D 1	20		79	LAC	3.95	79	T305	0.05	1				0.231	44	59	73	87	96	94
BS GLY 1	20		79	LAC	3.95	79	T2700	0.05	1				0.976	25	35	43	50	64	59
BT GLY 1	20		79	LAC	3.95	79	B700	0.05	1				1.449	21	27	33	42	57	84
BU GLY 1	20		78	LAC	3.9	78	B700	0.05	1	T2700	0.05	1	0.311	37	49	58	66	79	81
BV GLY 1	20		78	LAC	3.9	78	B700	0.05	1	K1251	0.05	1	1.085	26	34	41	49	66	82
BW GLY 1	20		78	LAC	3.9	78	B700	0.05	1	P188	0.05	1	1.48	8	11	16	33	62	86
BX GLY 1	20		78	LAC	3.9	78	B700	0.05	1	T2700	0.05	1	0.176	57	74	86	94	96	79

Figure 1E

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μm	% < 0.20 μm	% < 0.30 μm	% < 0.5 μm	% < 1.0 μm	% > 2.0 μm		
BY	GLY 1	20		LAC	3.9	78	B700	0.05	1	K1251	0.05	1	0.658	0	0	21	93	100	81	4
BZ	GLY 1	20		LAC	3.9	78	B700	0.05	1	T2700	0.05	1	0.159	63	78	88	94	95	79	4
CA	GLY 1	20		LAC	3.9	78	B700	0.05	1	K1251	0.05	1	0.297	34	50	70	95	100	81	4
CB	MEL 0.5	10		LAC	4.4	88	CEL	0.1	2				1.128	31	39	42	48	68	68	1
CC	MEL 0.5	10		LAC	4.3	87	P188	0.2	3	BC	0	0	0.27	38	53	59	62	81	73	1
CD	MEL 0.5	10		LAC	4.3	87	P188	0.2	3	CEL	0	1	0.278	40	52	58	62	76	74	1
CE	MEL 0.5	10		LAC	4.3	87	P188	0.2	3	DS	0	1	0.12	82	96	100	100	100	88	1
CF	MEL 0.5	10		LAC	4.4	89	P188	0.1	1	K25	0	1	0.249	42	55	59	61	74	69	1
CG	MEL 0.25	5		MAN	4.6	92	P188	0.2	3	LEC	0.02	0.5	0.123	81	96	100	100	100	58	1
CH	MEL 0.5	10		LAC	4.3	87	P188	0.2	3	LEC	0.02	0.5	0.144	71	88	94	94	97	68	1
CI	MEL 0.5	10		LAC	4.3	87	P188	0.2	3	SDC	0.02	0.5	0.184	54	70	79	81	87	63	1
CJ	MEL 0.5	10		LAC	4.3	87	P188	0.2	3	T80	0	1	0.224	45	61	70	75	87	68	1
CK	MEL 0.25	5		LAC	4.7	94	P188	0.1	1				0.158	63	81	90	90	93	48	1
CL	MEL 0.5	10		LAC	4.4	87	P188	0.2	3				0.169	59	76	85	87	93	58	1
CM	MEL 0.25	5		LAC	4.6	92	P188	0.2	3				0.221	46	60	68	69	75	68	1
CN	MEL 0.5	10		LAC	4.3	85	P188	0.3	5				0.309	39	49	55	56	66	74	1
CO	MEL 0.5	9.5		MAN	4.6	88	P188	0.2	3				0.251	43	55	61	62	68	55	1
CP	MEL 0.5	10		MAN	4.5	89	P3000	0.1	1				1.343	29	36	39	43	63	61	1
CQ	MEL 0.5	10		MAN	4.5	89	SDC	0.1	1				1.699	25	31	32	37	56	77	1

Figure 1F

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μ m	% < 0.20 μ m	% > 0.30 μ m	% > 0.5 μ m	% > 1.0 μ m	% > 2.0 μ m		
CR	MEL	0.5	10	LAC	4.4	88	T80	0.1	2				1.279	28	35	38	44	65	68	1
CS	MAN	2.5	50	LAC	2.35	47	SDS	0.15	3				0.318	31	48	65	80	84		5
CT	MAN	2.5	50	LAC	2.45	49	P188	0.05	1				0.33	30	46	64	77	82		5
CU	MAN	2.5	50	LAC	2.45	49	P40S	0.05	1				0.333	30	46	63	75	80		5
CV	MAN	2.5	50	LAC	2.45	49	B700	0.05	1				0.337	29	46	63	76	81		5
CW	MAN	2.5	50	LAC	2.45	49	P407	0.05	1				0.342	28	45	63	76	82		5
CX	MAN	2.5	50	LAC	2.45	49	T1221	0.05	1				0.411	24	40	56	69	75		5
CY	MAN	2.5	50	LAC	2.45	49	DS	0.05	1				0.462	22	37	52	65	71		5
CZ	MAN	2.5	50	LAC	2.45	49	SDS	0.05	1				1.369	1	6	20	43	56		5
DA	MAN	2.5	50	LAC	2.45	49	SDA	0.05	1				1.766	0	2	14	38	52		5
DB	MAN	2.5	50	LAC	2.45	49	CEL	0.05	1				1.86	0	2	14	37	51		5
DC	MAN	2.5	50	LAC	2.5	50							2.578	0	1	11	31	45		5
DD	CEL	0.5	10	LAC	4.3	86	SDS	0.1	2	P40S	0.1	2	0.134	76	88	91	91	93	88	1
DE	CEL	0.5	10	LAC	4.3	86	SDS	0.1	2	P407	0.1	2	0.14	75	83	83	83	86	90	1
DF	CEL	0.5	10	LAC	4.3	86	SDS	0.1	1	LEC	0.15	3	0.181	55	70	79	83	89	90	1
DG	CEL	0.5	10	LAC	4.3	86	SDS	0.1	1	B700	0.15	3	1.903	28	37	44	46	51	90	1
DH	CEL	0.5	10	LAC	4.5	90							5.296	8	11	13	13	16	85	1
DI	CEL	0.5	10	LAC	4.3	86	SDS	0.1	1	P3000	0.15	3	0.397	33	45	53	59	71	88	1
DJ	CEL	0.5	10	LAC	4.4	88	SDS	0.1	1	P8000	0.05	1	0.234	44	58	69	77	87	87	1

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μm	% < 0.20 μm	% < 0.30 μm	% < 0.5 μm	% < 1.0 μm	% < 2.0 μm		
DK	CEL	0.5	10	LAC	4.3	86	DS	0.1	2	P40S	0.1	2	15	0.319	35	48	61	69	74	88	1
DL	CEL	0.5	10	SOR	4.5	90							15	16.031	0	0	0	0	0.8	46	1
DM	CEL	0.5	10	SOR	4.45	89	SDS	0.1	1				15	0.173	57	72	79	80	86	52	1
DN	CYA	0.5	10	LAC	4.45	89	SDS	0.1	1				20	0.159	65	84	95	100	100	79	5
DO	CYA	0.5	10	MAN	4.45	89	SDS	0.1	1				20	0.194	52	68	79	84	84	87	5
DP	PRO	0.5	10	LAC	4.45	89	SDS	0.1	1				20	0.229	43	63	83	97	98	87	5
DQ	PRO	0.5	10	MAN	4.45	89	SDS	0.1	1				20	0.553	15	27	45	77	94	89	5
DR	PRO	0.5	10	LAC	4.45	89	C40	0.1	1				20	0.546	10	23	45	76	89	72	5
DS	SAL	0.51	10	LAC	4.5	89.5	LEC	0.05	1				20	0.128	84	98	100	100	100		
DT	SAL	0.51	10	LAC	4.5	89.5	LEC	0.05	1				20	0.42	31	42	53	57	57		
DU	CIP	0.76	15	MAL	4.1	83	T80	0.05	1	DS			20	0.22	40	74	85	85	92	96	6
DV	CIP	0.76	15	LAC	4.2	85							20	25.909	1	2	3.1	4.8	7	89	6
DW	CIP	0.76	15	MAL	4.3	85							20	0.238	43	56	58	58	61	93	6
DX	CIP	0.75	15	LAA	4.3	85							20	0.205	49	62	65	65	71	97	6
DY	CIP	0.75	15	LAA	4.2	84	T80	0.06	1				20	0.14	75	91	94	94	96	96	6
DZ	CIP	0.75	15	LAA	4.2	84	SOL	0.05	1				20	0.237	35	66	78	78	84	97	6
EA	CIP	0.75	15	LAA	4.2	84	CEL	0.06	1				20	0.23	37	69	81	81	87	87	6
EB	CIP	0.75	15	LAA	4.2	84	DS	0.05	1				20	0.216	42	74	83	83	91	96	6
EC	CIP	0.75	15	LAA	4.2	84	P8000	0.05	1				20	0.243	33	64	75	75	82	97	6

Figure 1G

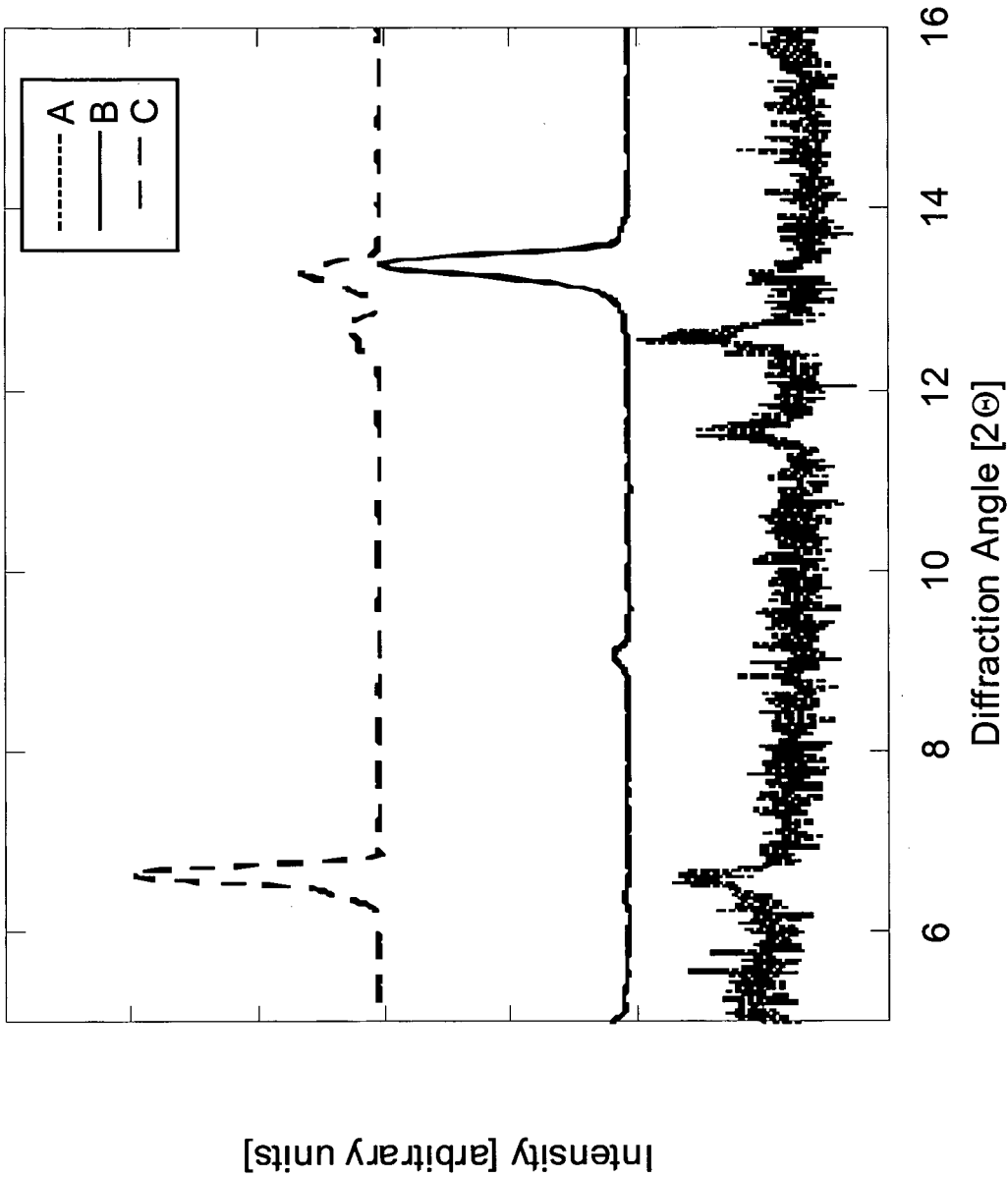


Figure 1H

Sample No.	Active material			Primary Matrix			Surfactant #1			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μ m	% < 0.20 μ m	% < 0.30 μ m	% < 0.5 μ m	% < 1.0 μ m	% < 2.0 μ m		
A	IND	1.20	12	LAC	8.80	88				30	0.753	25	34	44	55	70		
B	IND	1.20	12	LAC	8.70	87	SDS	0.1	1	30	0.677	14	26	41	65	91		
C	IND	1.20	12	LAC	8.70	87	B700	0.1	1	30	0.621	13	25	43	68	91		
D	MEL	1.2	20.0	MAN	4.62	77	SDS	0.18	3.0	10	0.277	37	53	66	74	86	83	
E	MEL	1.2	20.0	MAN	4.8	80				15	2.493	10	12	12	15	39	33	
F	DIC	3	30	MAN	6.7	67	SDS	0.3	3	90	0.157	63	79	86	88	93		

Figure 2A

Sample No.	Active material			Primary Matrix			2 nd Matrix			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μ m	% <0.20 μ m	% <0.30 μ m	% > 0.5 μ m	% > 1.0 μ m	% > 2.0 μ m		
A	NAA	1.2	30.0	LAC	2	50.0	TCD	0.8	20.0	20	0.188	48	64	75	81	92		
B	NAA	1.2	30.0	LAC	2	50.0	CAC	0.8	20.0	20	0.213	47	63	76	84	91		
C	NAA	1	25.0	LAA	2.2	55.0	XYL	0.8	20.0	20	0.2	50	65	75	79	89		
D	NAA	1	25.0	LAA	2.2	55.0	MAA	0.8	20.0	20	0.223	46	60	70	76	87		
E	NAA	1	25.0	LAA	2.2	55.0	TCD	0.8	20.0	20	0.215	47	62	70	73	83		

Figure 3A

Sample No.	Active material			Primary Matrix			Surfactant #1			2 nd Matrix			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μ m	% < 0.20 μ m	% < 0.30 μ m	% < 0.5 μ m	% < 1.0 μ m	% < 2.0 μ m		
A	MEL	20	20.0	LAC	77	77.0	SDS	3	3.0				15	0.24	39	64	87	97	100	90	
B	MEL	20	20.0	LAC	80	80.0							15	0.166	59	74	82	87	90	0.7	
C	IND	13	13.0	LAC	87	87.0							30	3.255	0	0	0	4	27	1	
D	IND	13	13.0	LAC	65.5	65.5				TA	22	21.5	30	0.272	34	55	76	87	93	0	
E	IND	13	13.0	LAC	86	86.0	SDS	1	1.0				30	0.836	22	31	39	56	83	76	
F	IND	13	13.0	LAC	64.5	64.5	SDS	1	1.0	TA	22	21.5	30	0.629	15	28	43	67	91	85	
G	MEL	25	25	LAC	72	72	SDS	3	3				15	0.283	33	53	73	84	92		

Figure 4A

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μ m	% < 0.20 μ m	% < 0.30 μ m	% < 0.5 μ m	% < 1.0 μ m	% < 2.0 μ m		
A	NAA	17.5	35.0	MAN	32	64.0	SDS	0.5	1.0				80	0.249	42	56	64	67	74		
B	NAA	17.5	35.0	MAN	31.5	63.0	SDS	0.5	1.0	P40S	0.5	1	80	0.261	39	55	67	77	88		
C	NAA	17.5	35.0	MAN	31.5	63.0	SDS	0.5	1.0	P3000	0.5	1	80	0.188	53	70	81	88	95		
D	IND	6	12.0	LAC	43.5	87.0	SDS	0.5	1.0				40	0.231	43	61	78	91	97		
E	IND	6	12.0	LAC	43	86.0	SDS	0.5	1.0	P407	0.5	1	40	0.152	66	85	95	97	98		
F	IND	6	12.0	LAC	43	86.0	SDS	0.5	1.0	P40S	0.5	1	40	0.155	65	85	96	98	98		

Figure 5A

Figure 6A

Sample No.	Active material			Primary Matrix		Surfactant #1			Surfactant #2			2 nd Matrix			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μm	% < 0.20 μm		% > 0.30 μm	% > 0.5 μm	% > 1.0 μm	% < 2.0 μm	No. Ave. nm			
A	NAA	70	35	LAC	128	64	SDS	2	1					60	0.345	35	47	56	61	73		98	O
B	NAA	70	35	MAN	128	64	SDS	2	1					50	0.73	31	41	48	51	58			C
C	NAA	60	30.0	MAN	138	69.0	SDS	2	1.0					50	0.181	55	73	86	92	96		92	C
D	NAA	60	30.3	MAN	138	69.7								50	0.319	35	48	59	64	75		23	C
E	DIC	52.5	15.0	LAC	294	84.0	SDS	3.5	1.0					40	0.16	64	84	97	99	99		64	E
F	DIC	52.5	13.0	LAC	224	66.0	SDS	3.5	1.0			TA	70 20	40	0.16	63	83	95	98	99		87	E
G	NAA	60	30	LAC	138	69	SDS	2	1					40	0.232	44	59	70	78	90		79	E
H	2,4D	40	20	LAC	160	80								30	0.212	47	69	90	100	100		95	
I	2,4D	40	20	LAC	158	79	SDA	2	1					30	0.189	53	72	87	95	97		97	
J	2,4D	40	20	LAC	158	79	K1251	2	1					30	0.2	50	71	89	97	97		97	
K	2,4D	40	20	LAC	158	79	D920	2	1					30	0.204	49	69	86	94	97		94	
L	2,4D	60	20	LAC	234	78	SDA	3	1	PVP	3	1		30	0.281	30	54	82	96	96		93	
M	2,4D	60	20	LAC	234	78	D920	4	1	PVP	3	1		40	0.183	55	75	91	98	98		90	
N	2,4D	60	20	LAC	234	78	K1251	3	1	PVP	3	1		40	0.208	48	68	88	99	100		92	
O	GLY	40	20	LAC	158	79	B700	2	1					90	0.297	38	50	61	74	87		18	
P	GLY	40	20	LAC	156	78	B700	2	1	T2700	2	1		45	0.188	53	71	85	93	96		79	D
Q	GLY	60	20	LAC	234	78	B700	3	1	T2700	3	1		30	4.798	0	0	0	0.2	9.9			D
R	GLY	60	20	LAC	234	78	B700	3	1	T2700	3	1		50	0.204	49	66	79	89	94			D

Figure 6B

Sample No.	Active material				Primary Matrix				Surfactant #1				Surfactant #2				2 nd		Time (mins.)		Particle Size							Yield (%)	Variations
	Name	Mass (g)	% w/w	% v/v	Name	Mass (g)	% w/w		Name	Mass (g)	% w/w		Name	Mass (g)	% w/w		Name	Mass (g)	% w/w		D(0.5) μ m	% > 0.20 μ m	% > 0.30 μ m	% > 0.5 μ m	% > 1.0 μ m	% > 2.0 μ m	No. Ave. nm		
S	GLY	60	20		LAC	234	78		B700	3	1		T2700	3	1				70		0.17	58	75	88	95	97		94.7	D
T	MEL	35	10		LAC	311.5	89		LEC	3.5	1								40		0.127	80	94	98	99			81	
U	MEL	35	10		MAN	311.5	89		LEC	3.5	1								20		0.199	50	67	76	82	91		59	1
V	MEL	35	10		LAC	309.8	89		P188	3.5	1		DS	1.77	1				20		0.13	77	94	100	100			90	1
W	MEL	17.5	5		MAN	323.8	93		P188	7	2		LEC	1.75	0.5				25		0.124	80	96	100	100			67	1
X	MEL	17.5	5		LAC	320.3	92		P188	10.5	3		LEC	1.75	0.5				40		0.129	78	94	99	99			94	1
Y	MEL	17.5	5		MAN	320.3	92		P188	10.5	3		LEC	1.75	0.5				25		0.14	72	88	93	94	98		97	1
Z	MEL	35	10		LAC	302.8	87		P188	10.5	3		LEC	1.75	0.5				30		0.168	59	75	83	87	94		52	1
AA	MEL	35	10		LAC	311.5	89		P188	3.5	1								40		0.118	87	99	100	100			87	1
AB	MEL	35	10		MAN	311.5	89		P188	3.5	1								30		0.164	60	77	87	93	97		32	1
AC	MEL	35	10		LAC	315.0	90												20		0.143	71	89	95	96	98		79	1
AD	MEL	35	10		MAN	315.0	90												25		0.26	39	55	66	73	85		56	1
AE	CRM	60	20		LAC	138	69		LEC	1	2								60		0.152	64	78	84	87	89		79	7
AF	CIL	30	10		LAC	267	89		SDS	3	1								20		0.162	64	86	99	100			84	5,D
AG	PRO	30	10		LAC	267	89		SDS	3	1								30		0.62	12	24	42	67	89		74	5,D
AH	PRO	30	10		LAC	270	90												30		0.91	9	18	33	52	61		66	5,D
AI	CIP	30.0	15		LAA	168.0	84		T80	2.00	1								20		0.139	76	91	94	94	95	88	94	E
AJ	CIP	30.1	15		LAA	170.0	85												20		0.171	60	75	79	79	82		36.7	E
AK	CIP	30.0	15		LAA	168.0	84		CEL	2.00	1								20		0.277	41	51	54	54	56		72	E

Sample No.	Active material				Primary Matrix			Surfactant #1			Surfactant #2			2 nd		Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	% v/v	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μm	% <0.20 μm		% <0.30 μm	% < 0.5 μm	% < 1.0 μm	% < 2.0 μm	No. Ave. nm			
AL	GLY	60.0	20		LAC	240.0	80								70	50.4	0	0	0	0.9	4.4	1282	26	3,P
AM	CEL	20.0	10		LAC	176.1	88	SDS	2.00	1	P40S	2	1		10	0.205	49	66	79	86	92	81	86	1,D
AN	CEL	20.0	10		LAC	180.1	90								10	4.775	0	0	0	0	6.4	2560	57	1,D
AO	CEL	20.0	10		LAC	176.0	88	SDS	2.00	1	P8000	2	1		10	0.353	34	46	56	64	77	80	86	1,D
AP	MAN	150.1	50	45	LAC	147.1	49	T3785	3.00	3					5	0.22	46	60	72	84	87	89	90	8,D
AQ	MAN	150.1	50	45	LAC	150.0	50								5	0.292	35	51	67	81	85	109	56	8,D
AR	MAN	150.0	50	45	LAC	147.0	49	DS	3.02	3					5	0.274	38	53	67	80	84		76	8,D
AS	NAA	105.1	35	39	MAN	195.0	65								80	0.189	53	70	82	87	91	80	81	
AT	NAA	105.0	35		MAN	180.1	60	MCC	15.00	5					80	0.261	40	54	65	69	75	81	66	D
AU	NAA	105.0	35		MAN	180.0	60	PML	15.10	5					80	0.243	42	58	69	76	85	83	51	D

Figure 6C

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			2 nd Matrix			Disintegrant			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) µm	% < 0.20 µm	% < 0.30 µm	% < 0.5 µm	% < 1.0 µm	% < 2.0 µm		
A	MTX	1.5	30.0	LAC	3.5	69.0	P407	0.1	1.0										60	0.16	63	77	84	89	93		2
B	MTX	1.5	30.0	LAC	3.5	70.0													60	0.28	40	52	59	59	71		2
C	MTX	17.2	43.0	LAC	22	56.0	SDS	0.4	1.0										60	0.142	70	83	88	91	94		2
D	MTX	20	50.0	LAC	10.4	26.0	SDS	0.8	2.0	P407	0.8	2	SB	8	20.0				60	0.137	73	89	95	100	100		9
E	MTX	2.5	50.0	LAC	2.35	47.0	SDS	0.8	2.0	P407	0.1	2							60	0.148	67	83	92	98	99		2
F	MTX	17.2	43.0	MAN	22.4	56.0	SDS	0.4	1.0										60	0.254	42	55	64	67	72		2
G	MTX	1	20	LAC	4	80													60	13.45	0	0	0	0	0	92	2
H	MTX	1	20	LAC	3.9	78	SDS	0.05	1	P407	0.05	1							60	0.13	76	91	96	98	98	97	2
I	MTX	1.25	25	LAC	2.85	68	SDS	0.05	1	P407	0.05	1	PVP	0.05	1	PRI	0.25	5	50	0.201	50	67	80	84	84	85	2
J	MTX	60	30	LAC	137	67	SDS	3	1.5	P407	3	1.5							5	3.943	20	27	30	31	38		2
K	MTX	60	30	LAC	137	67	SDS	3	1.5	P407	3	1.5							10	0.223	46	61	72	77	83		2
L	MTX	60	30	LAC	137	67	SDS	3	1.5	P407	3	1.5							16	0.153	64	79	86	93	96		2
M	MTX	60	30	LAC	137	67	SDS	3	1.5	P407	3	1.5							21	0.142	67	85	92	95	96		2
N	7M	151	94							PVP	1.61	1				PRI	8.04	5	2							97	2
O	MTX	60	30	LAC	137	67	SDS	3	1.5	P407	3	1.5							20	0.8	32	42	48	51	63	70	2,E

Figure 7A

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			2 nd Matrix			Time (mins.)	Particle Size						Yield (%)
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μm	% <0.20 μm	% <0.30 μm		% < 0.5 μm	% < 1.0 μm	% < 2.0 μm	Variations			
A	MEL	48	10	LAC	417.6	87	SDS	14.4	3						3	0.15	66	83	90	91	94	97	1
B	MEL	24	5	LAC	439.2	91.5	P188	14.4	3	LEC	2.4	0.5			8	0.159	63	81	91	94	98	97	1
C	MEL	24	5	MAN	439.2	91.5	P188	14.4	3	LEC	2.4	0.5			8	0.144	70	88	94	95	98	92	1
D	IND	62.4	13	LAC	312	65	SDS	4.8	1				TA	100.8	21	4	0.197	51	68	81	88	94	91
E	IND	62.4	13	LAC	312	66							TA	100.8	21	4	0.19	53	71	85	92	97	74
F	IND	62.4	13	LAC	312	65	SDS	4.8	1				TA	100.8	21	4	0.194	52	71	86	93	97	84
G	IND	48	10	SUC	427.2	89	SDS	4.8	1						5	0.213	47	64	76	84	92	93	
H	IND	48	10	SUC	427.2	89	SDS	4.8	1						6	0.192	52	72	87	93	96	94	
I	MTX	144	30	LAC	321.6	67	SDS	7.2	1.5	P407	7.2	1.5			4	0.243	44	58	68	74	84	93	2
J	ANT	50	10	LAC	445	89	SDS	5	1						4	0.288	32	51	73	86	91	90	5
K	DIC	72	15	LAC	403.2	84	SDS	4.8	1						3	0.186	54	74	89	95	98	94	
L	NAA	168	35	MAN	302.4	63	SDS	4.8	1	PVP	4.8	1			6	0.226	44	63	80	88	93	94	
M	NAA	168	35	MAN	297.6	62	SDS	4.8	1	PVP	4.8	1	P3000	4.8	1	7	0.287	31	52	73	85	93	98
N	COP	48	10	LFG	427.2	89	SDS	4.8	1						7	4.319	0	0	0	3	16	93	10
O	COP	96	20	LFG	374.4	78	LEC	9.6	2						18	2.375	0	0	0	9	39	80	10
P	CON	144	30	LFG	326.4	68	LEC	9.6	2						1.5	4.027	0	0	0	7	23	83	10

Figure 8A

Figure 9A

Sample No.	Active material		Primary Matrix			Surfactant #1			Surfactant #2			2 nd Matrix			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) µm	% < 0.20 µm		% > 0.30 µm	% > 0.5 µm	% > 1.0 µm	% > 2.0 µm	No.Ave.(nm)			
A	MEL	40	5	MAN	732	91.5	P188	24	3	LEC	4	0.5		40	0.116	84	97	100	100		96	1,I	
B	MEL	40	5	MAN	732	91.5	P188	24	3	LEC	4	0.5		45	0.122	82	97	100	100		95	1,I	
C	MEL	40	5	MAN	732	91.5	P188	24	3	LEC	4	0.5		40	0.124	80	96	100	100		97	1,I	
D	MEL	52.5	5	LAC	960.8	91.5	P188	31.5	3	LEC	5.25	0.5		50	0.156	64	81	89	90		88	1,H	
E	MEL	40.0	5	MAN	732.0	91.5	P188	24	3	LEC	4	0.5		40	0.142	71	88	93	93		96	1,I	
F	SAL	100.0	10	LAC	890.0	89	LEC	10.00						15	0.137	72	85	89	90	92	75	92 L	
G	SAL	100.0	10	LAC	900.0	90								15	4.954	0	0	2	11	24		95 L	
H	IND	130.0	13	LAC	870.0	87								36	0.18	56	74	89	96	98	80	65	
I	IND	130.1	13	LAC	860.1	86	SDS	10.00	1					36	0.192	52	73	90	95	97	83	85	
J	IND	130.1	13	LAA	870.0	87								36	0.186	54	72	86	93	97	80	51	
K	DIC	150.1	15	LAA	850.3	85								36	0.242	41	60	79	92	99	87	27	
L	MEL	105.0	10	LAC	913.5	87	SDS	31.50	3					20	0.137	74	90	95	95	96	79	94 G	
M	MEL	105.1	10	LAC	945	90.0								20								1,G	
N	IND	130.0	13	LAA	860	86	SDS	10	1					36	0.161	62	79	90	93	95		80 11,N	
O	IND	130.0	13	LAA	645	64.5	SDS	10	1			TA	215	36	0.160	62	79	90	94	96		87 11,N	
P	DIC	150	15	LAA	840	84	SDS	10	1					36	0.152	66	84	95	98	99		80 11,N	
Q	MEL	75	7.1	LAC	943.5	90.0	SDS	31.5	3					30	0.129	78	94		100		89	1,M	
R	MEL	71.6	6.8	LAC	946.9	90.2	SDS	31.5	3					30	0.312	72	89	94	94	96		92 1,F	
S	IND	120	12	LAC	435	43.5	SDS	10	1			TA	435	44	0.168	60	79	92	98	100		80 11,K	

Figure 9B

Sample No.	Active material		Primary Matrix			Surfactant #1			Surfactant #2			2 nd Matrix			Particle Size						Yield (%)		Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μ m	% > 0.20 μ m	% > 0.30 μ m	% > 0.5 μ m	% > 1.0 μ m	% > 2.0 μ m	No.Ave.(nm)	
T	IND	130	13	LAC	645	64.5	SDS	10	1			TA	215	21.5	36	0.160	63	79	93	97	99		11
U	IND	130	13	LAC	645	64.5	SDS	10	1			TA	215	21.5	36	0.179	56	72	89	95	97		11
V	IND	130	13	LAC	645	64.5	SDS	10	1			TA	215	21.5	40	0.182	55	70	83	87	92		11
W	DIC	150	15	LAC	840	84	SDS	10	1						36	0.183	55	72	91	96	97		11
X	DIC	150	15	LAC	840	84	SDS	10	1						36	0.186	54	74	94	98	99		11
Y	DIC	150	15	LAC	840	84	SDS	10	1						36	0.203	49	69	92	97	98		11
Z	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.399	33	44	53	59	69	
AA	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.337	34	47	58	65	71	
AB	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.300	37	50	61	69	76	
AC	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.360	34	46	56	61	69	
AD	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.366	33	45	55	61	69	
AE	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.301	36	50	62	69	75	
AF	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.298	37	50	62	68	74	
AG	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.195	51	65	74	78	83	
AH	NAA	334	35.1	MAN	599	62.9	SDS	9.55	1.0	PVP	9.55	1.0				60	0.294	37	51	62	68	76	
AI	MEL	105	11	LAC	864	86.4	SDS	31.5	3						20	0.189	53	72	84	88	94		F
AJ	MEL	105	11	LAC	864	86.4	SDS	31.5	3						25	0.153	65	84	94	95	98		F
AK	MEL	105	11	LAC	864	86.4	SDS	31.5	3						30	0.138	74	91	96	96	97		F
AL	MEL	105	11	LAC	864	86.4	SDS	31.5	3						35	0.126	79	96	100	100	100		F

Sample No.	Active material			Primary Matrix			Surfactant #1			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μm	% < 0.20 μm	% < 0.30 μm	% < 0.5 μm	% < 1.0 μm	% < 2.0 μm		
A	DIC	2.50	10	MAN	22.5	89	SDS	0.25	1	30	0.237	40	63	83	93	97		
B	NAA	70	35	LAC	128	64	SDS	2	1	60	0.224	72	81	92	81	92		
C	NAA	70	35	MAN	128	64	SDS	2	1	60	0.177	57	74	86	90	93		
D	NAA	80	40	LAC	118	60				45	2.039	19	26	31	36	49		
E	DIC	1650	15	LAC	9240	84	SDS	110	1	20	0.24	42	58	74	86	94	91	
F	DIC	3750	15	LAC	21000	84	SDS	250	1	25	0.214	49	68	82	93	97	97	

Figure 10A

Figure 11A

Sample No.	Active material			Primary Matrix			Surfactant #1			2 nd Matrix			3 rd Matrix			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	D(0.5) μm	% < 1.0 μm	% > 2.0 μm		% > 5.0 μm	% > 10.0 μm	% > 20.0 μm					
A	COF	0.5	10	LAC	4.45	89	LEC	0.05	1						300	5.766	1	10	43	78	99	68	10	
B	COF	1.0	20	LAC	3.95	79	LEC	0.05	1						300	4.493	1	12	56	89	100	81	10	
C	COF	0.5	10	SUC	4.45	89	LEC	0.05	1						300	5.718	1	9	43	81	100	63	10	
D	COF	1.0	20	SUC	3.95	79	LEC	0.05	1						300	4.094	1	12	63	95	100	79	10	
E	COF	1.5	30	SUC	3.45	69	LEC	0.05	1						300	3.629	1	15	71	97	100	85	10	
F	COF	2.5	50	SUC	2.45	49	LEC	0.05	1						300	3.51	2	18	72	97	100	89	10	
G	COF	4.95	99				LEC	0.05	1						30	10.91	2	12	31	47	77	0	10	
H	COF	1.0	20	LAC	1.95	39	LEC	0.05	1	SUC	1.00	20	SMP	1.00	300	4.249	1	14	59	90	99	78	10	
I	COF	1.0	20	SUC	2.95	59	LEC	0.05	1	FCM	1	20			300	3.241	4	24	74	97	100	90	10	
J	CON	1.0	20	SUC	3.85	77	LEC	0.15	3						20.5	3.093	8	28	76	97	100	87	10	
K	CON	1.5	30	SUC	3.35	67	LEC	0.15	3						20.5	2.672	6	32	85	99	100	84	10	
L	COP	0.5	10	LAC	4.45	89	SDS	0.05	1						120	0.833	53	71	91	96	99	21	10	
M	COP	0.5	10	SUC	4.45	89	SDS	0.05	1						120	1.552	37	59	87	95	97	50	10	
N	COP	0.5	10	LFG	4.45	89	LEC	0.05	1						150	0.299	62	70	83	87	90	41	10	
O	COP	0.5	10	LFG	4.45	89	LEC	0.05	1						150	0.96	51	66	88	95	98	60	10	
P	COP	0.75	15	SUC	4.2	84	LEC	0.05	1						180	1.071	49	66	90	97	99	74	10	
Q	COP	1.0	20	SUC	3.95	79	LEC	0.05	1						180	1.433	39	62	91	100	100	69	10	
R	COP	0.5	10	WP	4.45	89	SDS	0.05	1						60	1.671	24	60	94	100	100	17	10	
S	COP	0.5	10	WP	4.50	90									60	1.944	18	52	91	99	100	44	10	

Sample No.	Active material		Primary Matrix			Surfactant #1			Time (mins.)	Particle Size						Yield (%)	Variations	
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)		% w/w	D(0.5) μm	% < 1.0 μm	% < 2.0 μm	% < 5.0 μm	% < 10.0 μm			% > 20.0 μm
T	GIN	0.5	10	LAC	4.45	89	LEC	0.05	1	30	11.52	0	0	10	42	80	93	5
U	GIN	0.5	10	SUC	4.45	89	LEC	0.05	1	30	10.08	0	0	13	50	86	72	5
V	GIN	1	20	LAC	3.95	79	LEC	0.05	1	30	11.58	0	0	12	42	78	90	5
W	GIN	1	20	SUC	3.95	79	LEC	0.05	1	30	10.88	0	0	13	45	80	96	5
X	RAS	3	30	LAC	6.9	69	LEC	0.1	1	60	6	4	11	41	74	94	95	5
Y	RAS	1	10	SUC	8.9	89	LEC	0.1	1	60	5.84	4	11	42	76	95	94	5
Z	RAS	5	50	SUC	4.9	49	LEC	0.1	1	60	5.995	3	11	42	71	88	98	5
AA	RAS	7.5	75	SUC	2.4	24	LEC	0.1	1	60	6.374	2	9	39	69	87	99	5
AB	RAS	9.9	99				LEC	0.1	1	60	7.405	1	5	31	63	85	100	5
AC	RAS	3	30	SUC	6.7	67	LEC	0.3	3	60	4.917	3	15	51	80	96	99	5

Figure 11B

Sample No.	Active material		Primary Matrix			Surfactant #1			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)		% w/w	D(0.5) μm	% < 1.0 μm	% < 2.0 μm	% < 5.0 μm	% < 10.0 μm		
AD	FEN 1	20	SUC	3.91	78	LEC	0.10	2.0	60	7.367	3	9	34	62	83	95	5
AE	LIN 1	20	SUC	3.90	78	LEC	0.11	2.0	60	3.141	20	37	64	81	94	99	5
AG	GOJ 1	20	SUC	3.91	78	LEC	0.11	2.0	60	9.573	2	6	26	52	73	88	5
AH	GTE 1	20	SUC	3.91	78	LEC	0.10	2.0	60	3.241	14	30	70	90	95	93	5
AI	CLO 1	20	SUC	3.90	78	LEC	0.1	2.0	60	3.862	4	16	66	94	100	98	5
AJ	APR 1	20	SUC	3.89	78	LEC	0.1	2.0	60	2.995	16	35	71	89	95	96	5
AK	PEA 1	20	SUC	3.90	78	LEC	0.1	2.0	60	7.009	1	4	31	71	96	94	5
AL	BEA 1	20	SUC	3.91	78	LEC	0.11	2.0	60	10.59	1	2	16	47	82	95	5
AM	RAS 3	30	SUC	6.80	78	LEC	0.2	2.0	60	5.143	5	16	49	80	96	96	5
AN	RAS 3	30	SUC	6.51	78	LEC	0.5	5.0	60	5.403	3	13	46	76	94	97	5
AO	LAV 1	20	SC	3.93	78	SDS	0.1	2.0	60	4.632	5	17	54	83	95	94	5
AP	LAV 1	20	SC	3.91	78	B700	0.1	2.0	60	4.782	6	16	52	84	99	92	5
AQ	GOJ 5.1	100							60	61.37	1	3	8	14	24		5
AR	MST 1	20	SUC	3.90	78	LEC	0.1	2.0	60	4.656	5	19	53	75	92	93	5
AS	CNG 1	20	SUC	3.90	78	LEC	0.1	2.0	60	3.135	14	34	66	83	92	93	5
AT	CNQ 1	20	SUC	3.91	78	LEC	0.1	2.0	60	5.082	4	16	49	72	89	93	5
AU	TUR 1	20	SUC	3.90	78	LEC	0.11	2.0	60	14.88	1	3	15	35	62	96	5
AV	TUR 1	20	LAC	3.91	78	LEC	0.11	2.0	60	14.66	1	3	16	35	63	96	5

Figure 11C

Sample No.	Active material			Primary Matrix			Surfactant #1			2 nd Matrix			3 rd Matrix			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μ m	% < 1.0 μ m	% < 2.0 μ m	% < 5.0 μ m	% < 10.0 μ m	% > 20.0 μ m		
A	COF	105	30	SUC	241.5	69	LEC	3.5	1							60	7.736	2	11	32	63	94		10
B	COF	336.5	99				LEC	3.5	1							60	7.531	2	12	38	58	78	94	10
C	CON	60	30	SUC	134	67	LEC	6	3							10	4.701	3	14	53	84	97	75	10,B
D	CON	40	20	SUC	84	42	LEC	6	3	FCM	50	25	LFG	20	10	5	3.873	5	21	62	88	98	83	10,B
E	COP	35	10	LFG	311.5	89	SDS	3.5	1							45	4.246	3	17	59	91	100	74	10
F	COP	35	10	SUC	311.5	89	LEC	3.5	1							300	1.417	39	63	90	96	99	84	10

Figure 12A

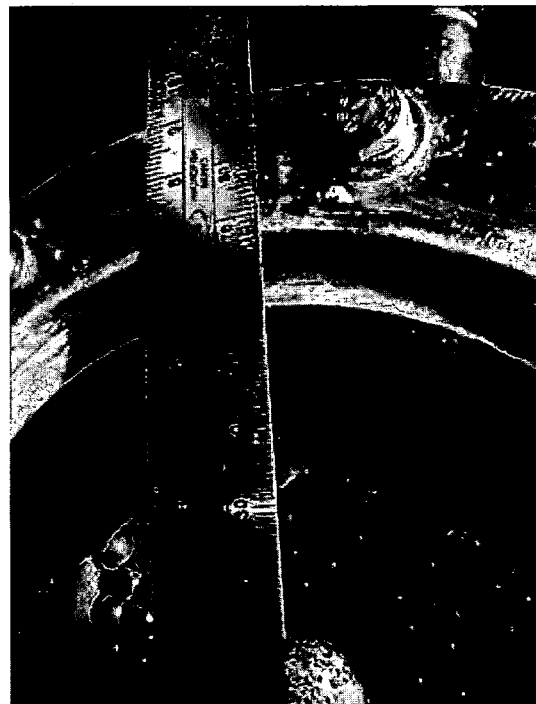


Figure 12B

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			Surfactant #3			Disintegrant			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μm	% < 0.20 μm	% < 0.30 μm	% < 0.5 μm	% < 1.0 μm	% < 2.0 μm		
A	NAA	105	35	MAN	189	63	SDS	3	1	P3000	3	1							80	0.19	53	71	84	91	95	90	
B	NAA	105	35	MAN	189	63	SDS	3	1	P407	3.1	1							40	0.89	26	36	45	51	57		
C	NAA	105	35	MAN	189	63	SDS	3	1	P407	3.1	1							60	0.31	36	49	61	69	76		
D	NAA	105	35	MAN	189	63	SDS	3	1	P407	3.1	1							80	0.19	52	70	84	90	93	82	
E	NAA	105.1	35	MAN	192	64	SDS	3	1										80	0.24	43	59	72	78	81	84.6	
F	NAA	105	35	MAN	171	57	SDS	3	1	P3000	3	1	PVP	3	1	PML	15	5	80	0.27	39	54	67	74	78	89.2	12
G	NAA	105	35	MAN	171	57	SDS	3	1	P407	3	1	PVP	3.02	1	PML	15.1	5	80							88.2	
H	NAA	105.2	35	MAN	174	58	SDS	3	1	PVP	3	1				PML	15.0	5	80							87.1	
I	NAA	105	35	MAN	189	63	SDS	3	1	P3000	3	1							80	0.25	27	67	91	100	100	88	
J	NAA	105.7	35	MAN	186	64	SDS	3	1	P3000	3	1	PVP	3.01	1				80	0.24	29	68	90	99	100	89.7	
K	NAA	105.1	35.0	MAN	195	65.0													80	0.19	53	70	82	87	91	81	
L	NAA	105	35.0	MAN	180	60.0										MCC	15	5	80	0.26	40	54	65	69	75	66	12,D
M	NAA	105	35.0	MAN	180	60.0										PML	15	5	80	0.24	42	58	69	76	85	51	12,D

Figure 13A

Sample No.	Active material			Primary Matrix			Surfactant #1			Surfactant #2			Time (mins.)	Particle Size						Yield (%)	Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) μ m	% < 0.20 μ m	% < 0.30 μ m	% < 0.5 μ m	% < 1.0 μ m	% > 2.0 μ m		
A	NAA	1.5	30	LAC	3.2	64	SDS	0.05	1	MCC	0.25	5	40	2.6	29	41	47	61	77	86	
B	14A													0.2	68	79	84	94	99		12
C	NAA	1.5	30	LAC	3.45	69	SDS	0.05	1				40	0.2	79	95	98	100	100	95	
D	14C													0.2	80	94	97	100	100		12
E	14C	2.5	95	MCC	0.13	5							1	1.3	34	49	52	56	60	88	
F	14C	2.5	91	MCC	0.25	9							1	0.8	36	52	56	62	72	83	
G	14E													0.2	79	92	96	99	100		12
H	14F													0.2	79	93	97	99	100		12
I	NAA	1.5	30	LAC	2.95	59	SDS	0.05	1	MCC	0.5	10	40	6.4	12	19	25	43	64	96	
J	NAA	1.5	30	LAC	2.45	49	SDS	0.05	1	MCC	1	20	40	8.6	0	0	7	31	56	95	
K	14I													1.7	32	44	53	77	94		12
L	14J													4.1	0	0	12	61	92		12

Figure 14A

Sample No.	Active material			Primary Matrix			Surfactant #1			2 nd Matrix			Time (mins.)	Particle Size						Variations
	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w	Name	Mass (g)	% w/w		D(0.5) µm	% < 0.20 µm	% < 0.30 µm	% < 0.5 µm	% < 1.0 µm	% > 2.0 µm	
A	G	71.6	6.8	LAC	946.9	90.2	S	31.5	3				20	0.116	86	96	96	96	96	G
B	G	71.6	6.8	LAC	946.9	90.2	S	31.5	3				37	0.251	79	96	100	100	100	1,F
C	H	71.6	6.8	LAC	946.9	90.2	S	31.5	3				30	0.312	72	89	94	94	96	1,F
D				LAC	315.6	96.8	S	10.5	3.2				30							D
E	G	0.68	6.8	D	9.32	93.2														
F	H	0.68	6.8	D	9.32	93.2														
G	Mel													8.791	0	0	0	1.8	7.1	1
H	Mel													2.824	0	0	0	2	26	1
I				LAC	741.0	74.1	S	11.0	1.1	TA	247.0	24.7								
J	N	112.4	13.0	I	752.4	87.0								1.075	12	18	27	47	76	
K	IND	130.0	13.0	LAC	645.0	64.5	S	10.0	1.0	TA	215.0	21.5		0.21	48	62	71	78	93	
L	IND	130.0	13.0	LAC	645.0	64.5	S	10.0	1.0	TA	215.0	21.5		1.075	12	18	27	47	76	
M	IND																			
N	IND													5.253	0	0	0	1	09	
O	MEL	20.0	20.0	LAC	77.0	77.0	S	3.0	3.0				20	0.255	36	60	83	95		
P	MEL	15.0	15.0	LAC	82.0	82.0	S	3.0	3.0				15	0.2	45	67	86	96		
Q	MEL	10.0	10.0	LAC	87.0	87.0	S	3.0	3.0				30	0	28	47	73	92		A
R	SAL	3.0	1.0	LAC	294	98	LEC	3.0	1.0				60							
S	SAL	3.0	1.0	LAC	294.1	98	T80	3.3	1.0				30							
T	SAL	3.0	1.0	LAC	294	98	LEC	3.0	1.0				20							

Figure 15

Sample Number	Powder Adherence - Residual mass (mg)				Powder Flow - Angle of Repose (θ°)		Dry powder particle size					
	mean	%RSD	mean	%RSD	mean	%RSD	d (0.1)	d (0.5)	d (0.9)	D [4, 3]	% < 2.0 μm	% > 10.0 μm
B	2.3	84.56	9.1	7.9	3		0.9	11.0	70.1	23.2	17.8	52.7
C	1.3	31.22	3.8	86.6	4		0.8	10.2	67.6	21.6	18.6	50.6
E	3.4	34.43	18.4	23.7	28							
F	3.9	54.84	10.5	37.6	42							
G	7.7	33.35	6.1	26.8	381		1.2	6.2	19.9	9.5	15.4	30.2
H	18	86.2	69.7	97.4	54							
J	5.5	54.38	13.4	13.2	7	43	1.3	13.6	103.2	39.9	14.7	56.3
K	3.3	61.94	8.2	16	5	35	1.3	11.4	58.0	21.1	13.8	53.5
L	11.7	61.85	4.3	23.6	56	26	0.6	1.5	3.3	1.7	66.1	0.0
M	10.9	52.93	38.3	66.9	83	43	0.5	2.0	5.3	2.5	50.8	0.6
O							0.7	6.5	57.3	21.1	25.0	40.6
P							0.7	5.9	49.6	18.7	27.0	38.2
Q							0.8	6.8	50.9	20.9	24.2	41.2
S							1.3	8.4	42.2	15.5	13.7	44.1
T							1.3	12.5	61.7	23.1	14.0	55.1

Figure 16

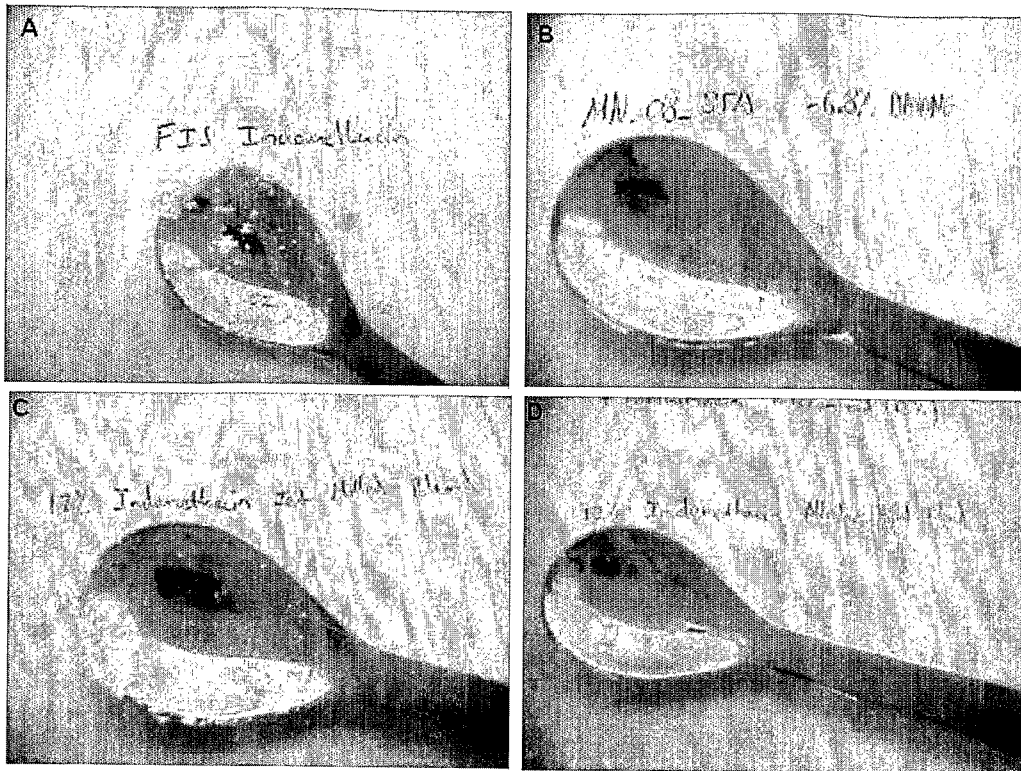


Figure 17

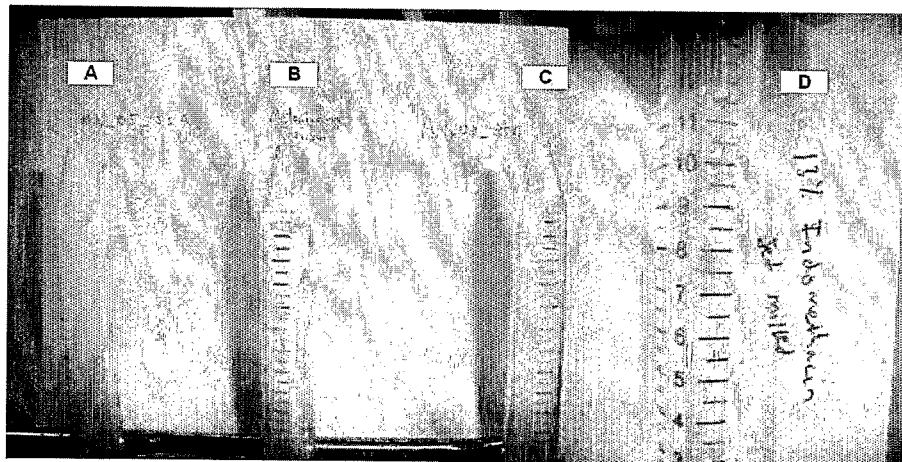


Figure 18

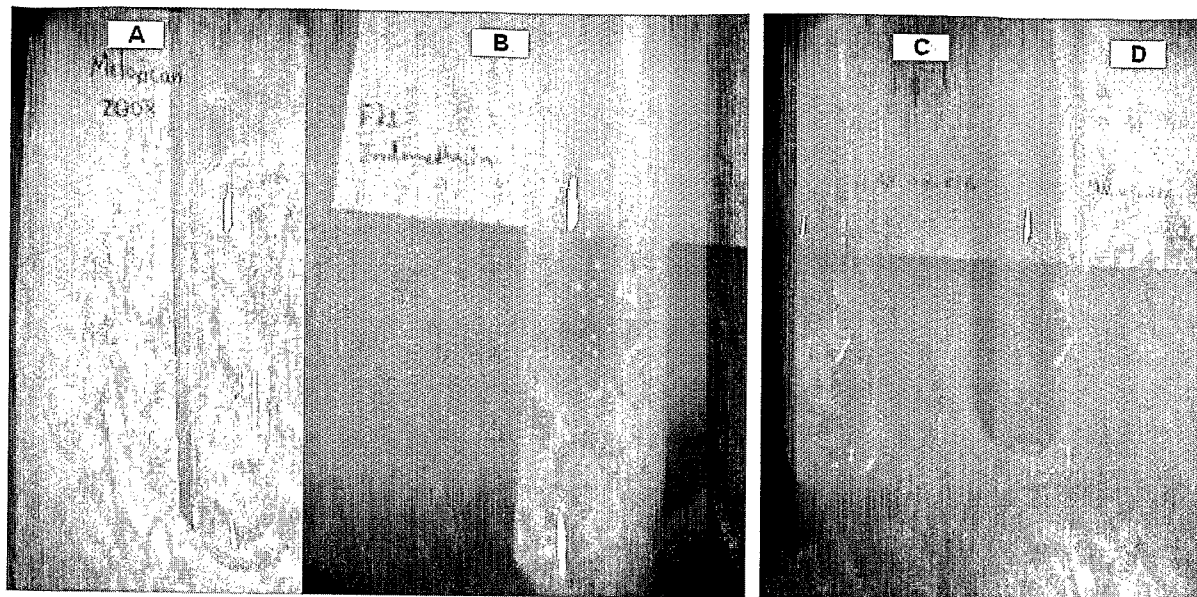


Figure 19

Sample Number	Average Bulk Density (g/mL)	Average Tap Density (g/mL)	Basic Flow Energy (BFE) (mJ)	Specific Energy (SE) (mJ/g)	PD15 (mBar)	CPS18 (%)
B	0.42	0.77				
C	0.43	0.80				
E	0.40	0.85				
F	0.43	0.91				
G	0.45	0.89				
H	0.26	0.51				
J	0.47	0.71	445	9	21	24
K	0.47	0.73	370	7	6	17
L	0.23	0.34	692	15	47	27
N	0.19	0.3	654	16	14	37

Figure 20

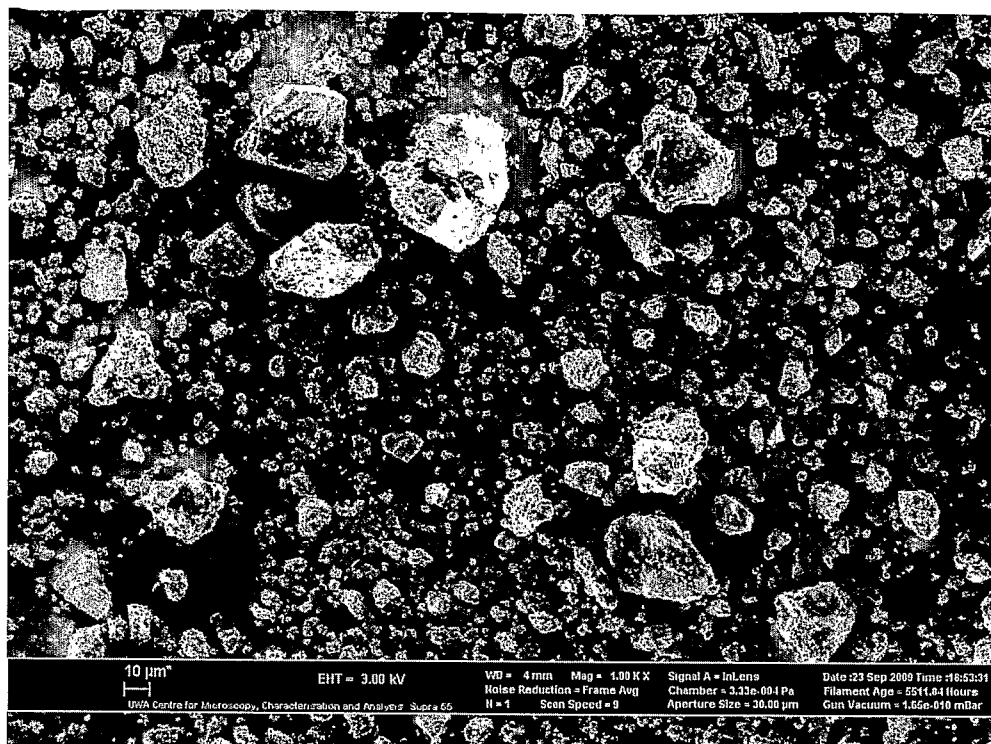


Figure 21

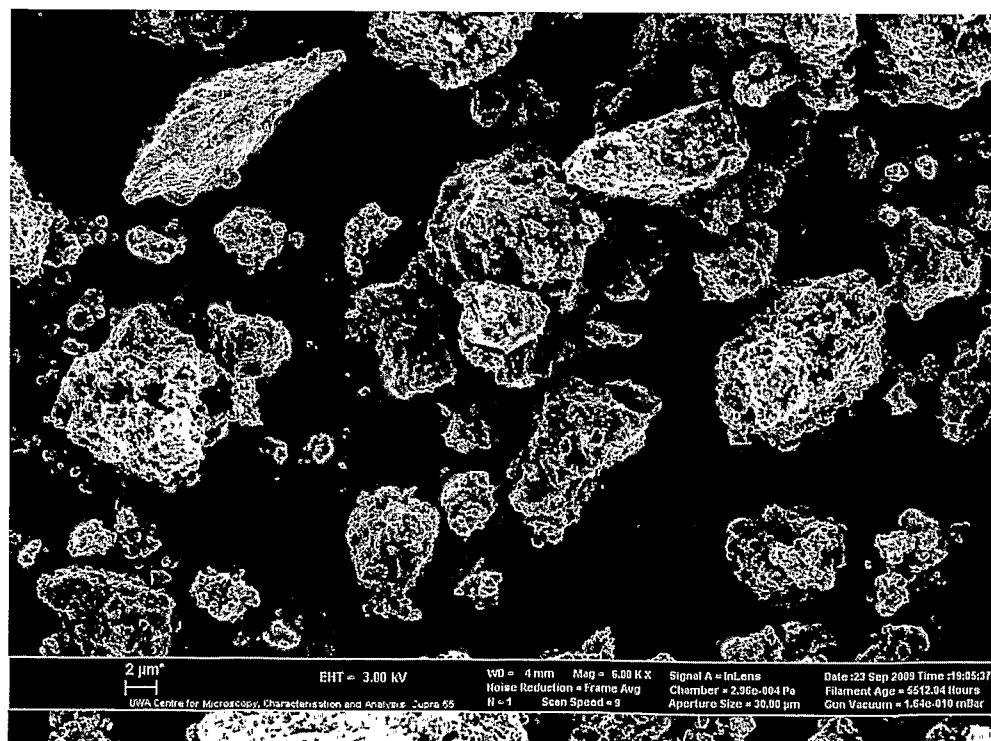


Figure 22

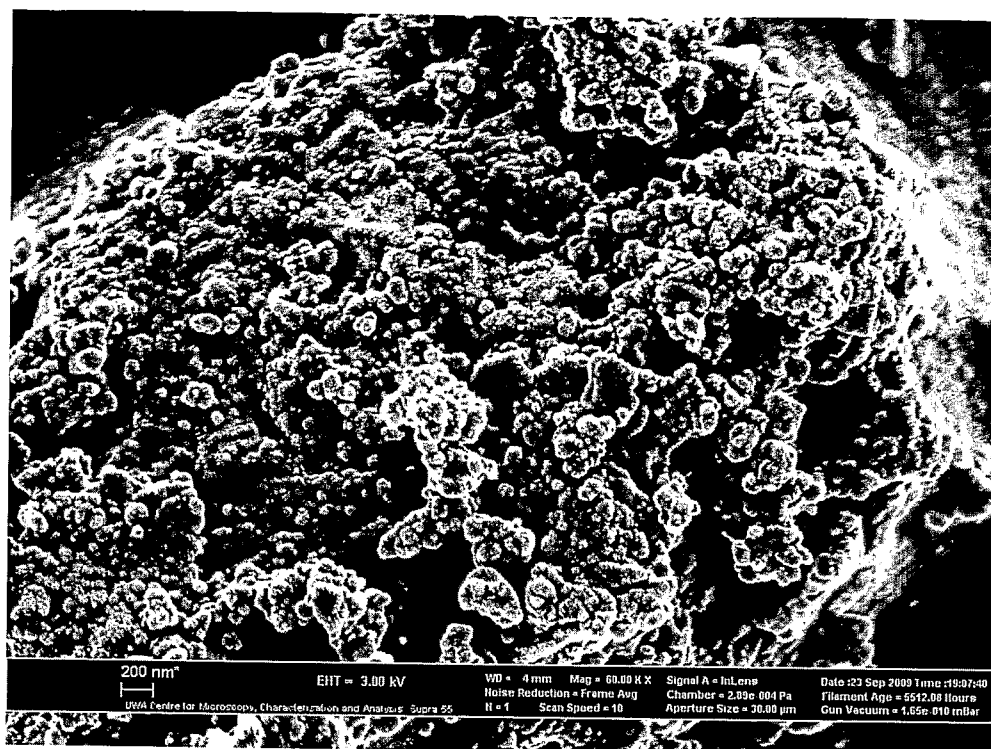


Figure 23

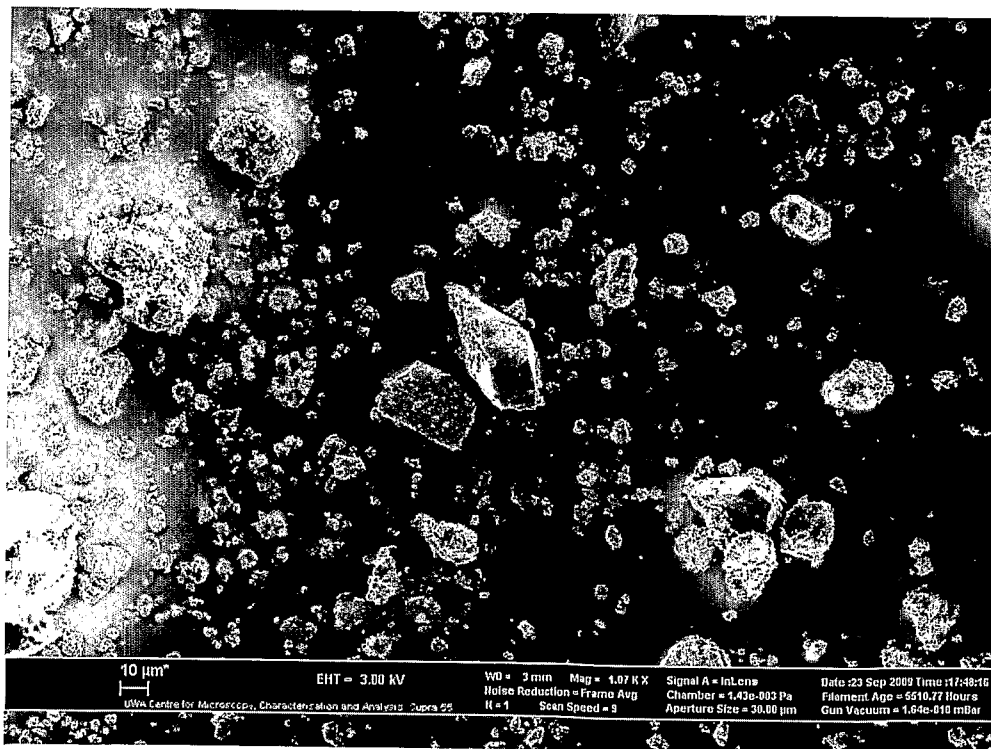


Figure 24

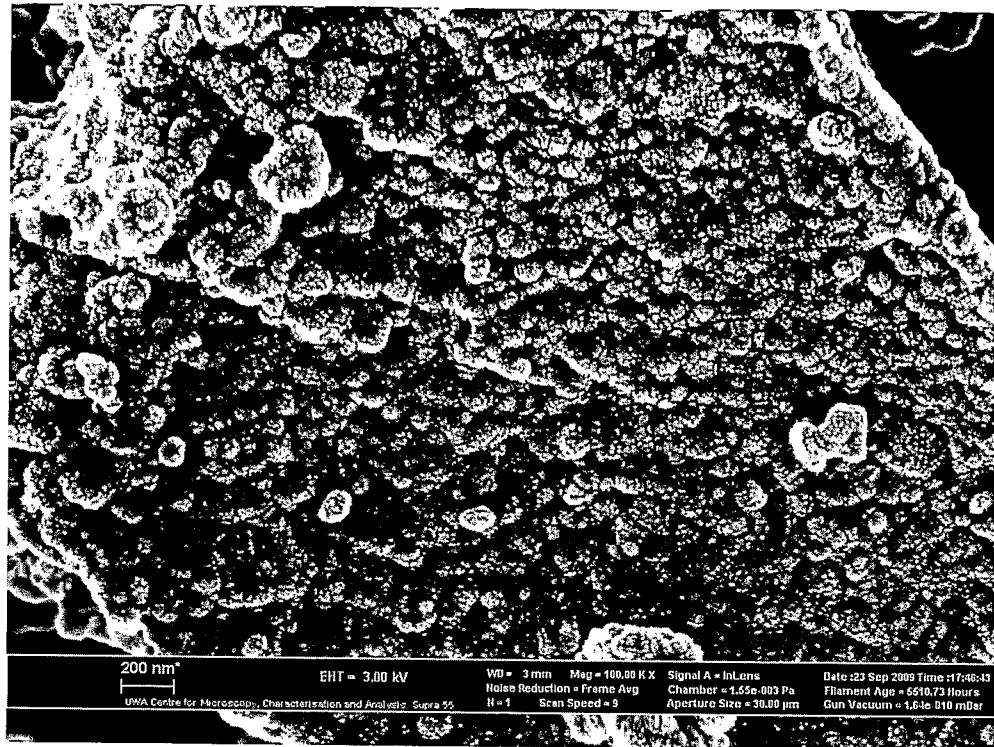


Figure 25

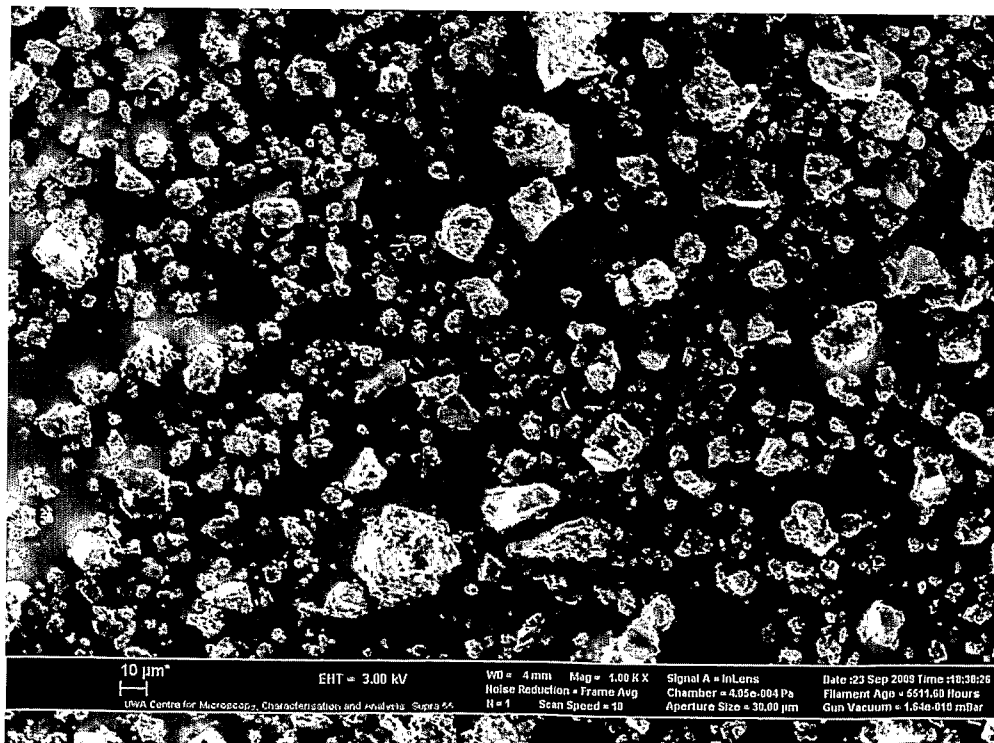


Figure 26

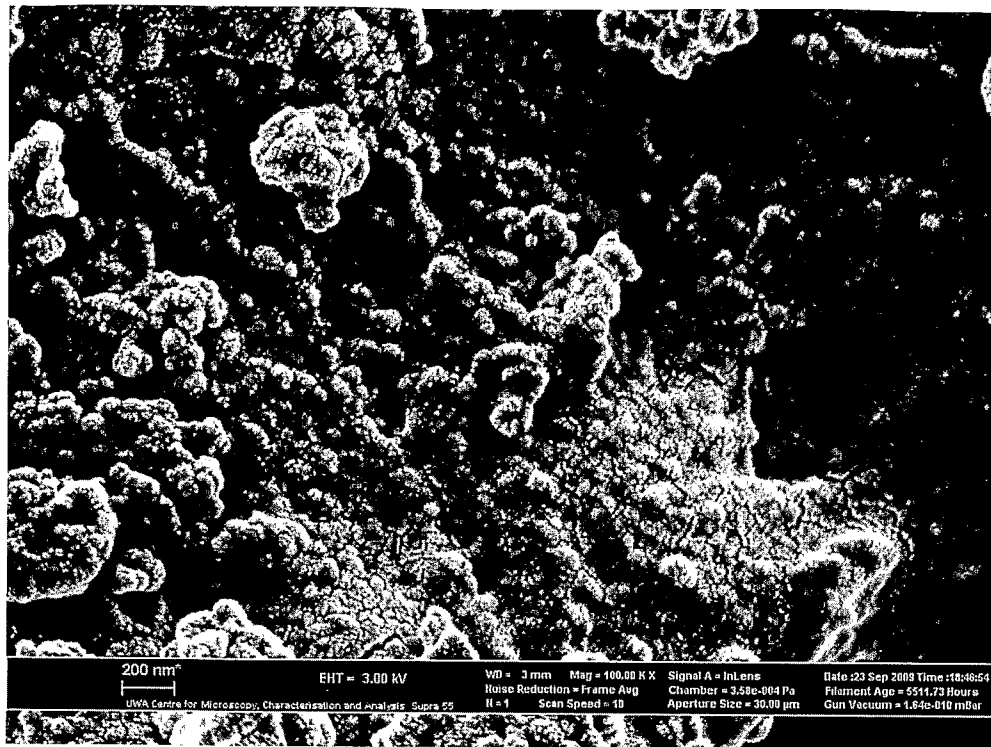


Figure 27

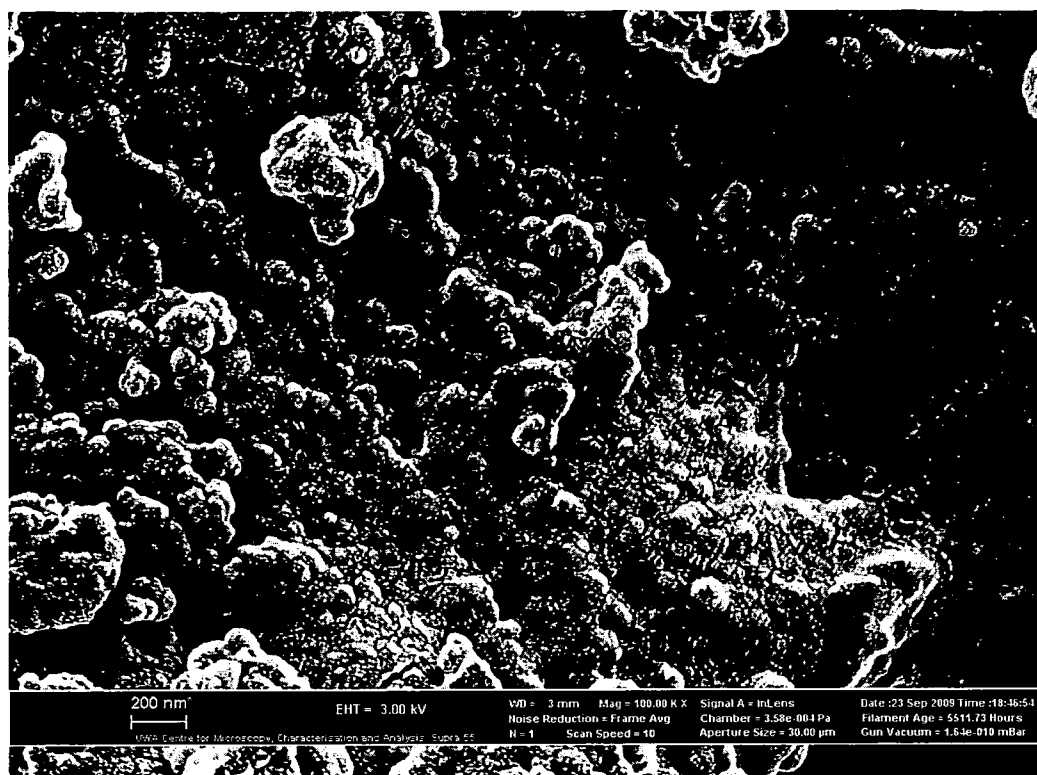


Figure 28