

ANALYTICAL RESULTS

- 1) GELLED CANDY**
- 2) NOUGAT**
- 3) CARAMEL**
- 4) COMPOUND COATING**

TABLE 1

ANALYTICAL RESULTS FOR ASPARTAME SWEETENED GELLED CANDY
STORED UNDER DIFFERING CONDITIONS (% by weight)

Temperature (weeks)	APM (%)	DKP (%)	α AP (%)	pH	Moisture (%)
Initial					
APM (0)	0.084	0.004	0.002	3.8	13.3
Sucrose (0)	----	----	----	3.7	15.4
APM 80°F (2)	0.075	0.007	ND	ND	ND
APM 60°F (3)	0.083	0.004	0.001	ND	ND
APM 70°F (4)	0.081	0.007	0.002	ND	ND
APM 80°F (4)	0.074	0.009	0.002	ND	ND
APM 80°F (6)	0.073	0.012	0.002	ND	ND
APM 60°F (7)	0.079	<0.001	<0.001	ND	ND
APM 70°F (8)	0.075	0.008	0.004	ND	ND
APM 80°F (9)	0.062	0.014	0.003	ND	ND
APM 80°F (11)	0.062	0.017	0.004	ND	ND
APM 60°F (12)	0.075	0.005	0.002	ND	ND
APM 70°F (13)	0.074	0.012	0.003	ND	15.7
APM 80°F (14)	0.059	0.018	0.005	ND	10.6
APM 60°F (15)	0.074	0.006	0.004	ND	8.4
APM 60°F* (16)	0.069	0.009	0.004	3.6	12.5
Sucrose 60°F (16)	----	----	----	3.3	12.2
APM 80°F (17)	0.049	0.019	0.004	3.7	10.6
APM 70°F (18)	0.066	0.013	0.003	ND	ND
APM 70°F (22)	0.066	0.013	0.004	ND	ND
APM 60°F (24)	0.072	0.009	0.006	3.5	10.0
Sucrose 60°F (24)	----	----	----	3.3	10.4
APM 60°F (25)	0.074	0.009	0.004	4.0	13.3
APM 70°F (26)	0.059	0.019	0.009	3.82	10.0

ND = Not Done

* additional samples

TABLE 2

ANALYTICAL RESULTS FOR LYCASIN AND ASPARTAME FLAVORED NOUGAT STORED UNDER
DIFFERING CONDITIONS (% by weight)

Temperature (weeks)	APM (%)	DKP (%)	α AP (%)	pH	Moisture (%)
Initial (0)					
APM	0.290	0.006	<0.001	6.6	9.8*
Lycasin Alone	----	----	----	6.7	10.1*
Sucrose	----	----	----	6.6	10.9*
APM 70°F** (3)	0.265	0.038	0.002	ND	ND
APM 90°F** (3)	0.252	0.049	0.002	ND	ND
APM 45°F (4)	0.277	0.005	<0.001	ND	ND
APM 90°F (6)	0.215	0.059	0.001	ND	ND
APM 70°F (7)	0.247	0.048	0.004	ND	ND
APM 90°F (7)	0.220	0.069	0.004	ND	ND
APM 90°F (8)	0.222	0.072	0.003	ND	ND
APM 45°F (9)	0.284	0.014	0.001	ND	ND
APM 90°F (10)	0.209	0.079	0.012	ND	ND
APM 70°F (11)	0.246	0.008	0.010	ND	ND
APM 90°F (12)	0.195	0.081	0.017	ND	ND
APM 45°F (13)	0.284	0.013	<0.001	ND	ND
APM 70°F (16)	0.232	0.044	0.006	ND	ND
APM 90°F (17)	0.151	0.096	0.017	6.3	5.8
APM 45°F (17)	0.274	0.013	0.005	6.7	10.2
APM 70°F (21)	0.230	0.054	0.011	ND	ND
APM 45°F (21)	0.274	0.017	0.003	ND	ND
APM 45°F (26)	0.279	0.020	0.012	6.4	10.5
Lycasin alone 45°F (26)	----	----	----	6.4	10.6
APM 70°F (26)	0.222	0.064	0.025	6.3	11.1
Lycasin alone 70°F (26)	----	----	----	6.5	10.6

*Loss on Drying

**Incubator malfunctioned for 8 days

ND = Not Done

TABLE 3

ANALYTICAL RESULTS IN LYCASIN AND ASPARTAME SWEETENED CARAMEL
UNDER DIFFERING CONDITIONS (% by weight)

Temperature (weeks)	APM (%)	DKP (%)	α AP (%)	pH	Moisture (%)
Initial (0)					
APM	0.094	<0.001	<0.001	6.4	9.1
Lycasin alone	----	----	----	6.4	10.4
Sucrose	----	----	----	6.4	12.3
APM 90°F (2)	0.092	0.004	<0.001	ND	ND
APM 90°F (3)	0.093	0.006	<0.001	ND	ND
APM 45°F (4)	0.100	0.002	<0.001	ND	ND
APM 70°F (5)	0.098	0.003	<0.001	ND	ND
APM 90°F (6)	0.089	0.009	0.002	ND	ND
APM 45°F (8)	0.096	0.002	0.001	ND	ND
APM 70°F (9)	0.092	0.005	0.001	ND	ND
APM 90°F (10)	0.081	0.011	0.002	ND	ND
APM 45°F (11)	0.098	0.003	0.001	ND	ND
APM 90°F (12)	0.076	0.012	0.002	ND	ND
APM 70°F (13)	0.089	0.007	0.001	ND	ND
APM 90°F (14)	0.078	0.014	0.001	ND	ND
APM 45°F (15)	0.098	0.002	<0.001	ND	ND
APM 70°F (16)	0.088	0.007	0.008	ND	ND
APM 90°F (17)	0.068	0.017	0.002	6.2	9.8*
APM 70°F (22)	0.087	0.008	0.001	ND	ND
APM 45°F (26)	0.097	0.002	<0.001	6.0	9.3
APM 70°F (26)	0.084	0.007	0.001	6.1	10.6
Lycasin alone					
45°F (26)	----	----	----	6.1	5.3
Lycasin alone					
70°F (26)	----	----	----	6.2	13.9

*Performed at 20 weeks storage
ND = Not Done

TABLE 4

ANALYTICAL RESULTS IN COMPOUND COATING UNDER DIFFERING CONDITIONS
(% by weight)

Temperature (weeks)	APM (%)	DKP (%)	α AP (%)	pH	Moisture (%)
Initial (0)					
APM	0.141	<0.001	<0.001	6.5	0.1
Sucrose	----	----	----	6.5	0.5
APM 80°F (2)	0.140	0.004	<0.001	ND	ND
APM 60°F (3)	0.142	0.004	<0.001	ND	ND
APM 70°F (5)	0.140	0.004	<0.001	ND	ND
APM 80°F (4)	0.138	0.008	<0.001	ND	ND
APM 80°F (6)	0.134	0.008	<0.001	ND	ND
APM 60°F (8)	0.140	0.007	<0.001	ND	ND
APM 70°F (9)	0.136	0.006	<0.001	ND	ND
APM 80°F (10)	0.132	0.009	<0.001	ND	ND
APM 60°F (12)	0.137	0.004	<0.001	ND	ND
APM 80°F (13)	0.127	0.012	<0.001	ND	ND
APM 70°F (14)	0.135	0.007	<0.001	ND	ND
APM 80°F (15)	0.127	0.016	<0.001	ND	ND
APM 60°F (18)	0.137	0.007	<0.001	ND	ND
APM 70°F (18)	0.134	0.008	<0.001	ND	ND
APM 70°F (21)	0.130	0.011	<0.001	ND	ND
APM 60°F (25)	0.135	0.004	<0.001	6.6	1.8
APM 70°F (27)	0.126	0.004	<0.001	6.5	1.7

ND = Not Done