



Tool to Assist in the Identification of Food Chemical Usage Trends (1985)

Pages
46

Size
7 x 10

ISBN
0309323045

Committee on Food Additives Survey Data; Food and Nutrition Board; Commission on Life Sciences; National Research Council

 [Find Similar Titles](#)

 [More Information](#)

Visit the National Academies Press online and register for...

- ✓ Instant access to free PDF downloads of titles from the
 - NATIONAL ACADEMY OF SCIENCES
 - NATIONAL ACADEMY OF ENGINEERING
 - INSTITUTE OF MEDICINE
 - NATIONAL RESEARCH COUNCIL
- ✓ 10% off print titles
- ✓ Custom notification of new releases in your field of interest
- ✓ Special offers and discounts

Distribution, posting, or copying of this PDF is strictly prohibited without written permission of the National Academies Press. Unless otherwise indicated, all materials in this PDF are copyrighted by the National Academy of Sciences.

To request permission to reprint or otherwise distribute portions of this publication contact our Customer Service Department at 800-624-6242.

Copyright © National Academy of Sciences. All rights reserved.

REFERENCE COPY
FOR LIBRARY USE ONLY

A TOOL TO ASSIST IN THE IDENTIFICATION OF
FOOD CHEMICAL USAGE TRENDS

Food and Nutrition Board
Commission on Life Sciences
National Research Council
Washington, D.C.

September 1985

NAS-NAE
OCT 18 1985
LIBRARY

TX
607
.N37
1985
C.1

COMMITTEE ON FOOD ADDITIVES SURVEY DATA

HAROLD H. SANDSTEAD (Chairman), Department of Preventive Medicine and
Community Health, University of Texas, Galveston, Texas

OWEN R. FENNEMA (Vice Chairman), Department of Food Science, University of
Wisconsin, Madison, Wisconsin

HOWARD E. BAUMAN, Science and Regulatory Affairs, The Pillsbury Company,
Minneapolis, Minnesota

RUDOLPH H. ELLINGER, Dr. R. H. Ellinger & Associates, Northbrook, Illinois

GEORGE W. IRVING, JR., Agriculture Research Institute, Bethesda, Maryland

KAREN J. MORGAN, Department of Human Nutrition, University of Missouri,
Columbia, Missouri

PHILIP E. NELSON, Food Sciences Institute, Purdue University, W. Lafayette,
Indiana

Staff

ROBERT E. REHWOLDT, Staff Officer, Food and Nutrition Board
NORMAN GROSSBLATT, Editor, Commission on Life Sciences

FOOD AND NUTRITION BOARD

KURT J. ISSELBACHER (Chairman), Harvard Medical School and Department of Gastroenterology, Massachusetts General Hospital, Boston, Massachusetts

RICHARD J. HAVEL (Vice Chairman), Cardiovascular Research Institute, University of California School of Medicine, San Francisco, California

HAMISH N. MUNRO (Vice Chairman), Human Nutrition Research Center on Aging, Tufts University, Boston, Massachusetts

WILLIAM E. CONNOR, Department of Medicine, Oregon Health Sciences University, Portland, Oregon

PETER GREENWALD, Division of Cancer Prevention and Control, National Cancer Institute, Bethesda, Maryland

M. R. C. GREENWOOD, Department of Biology, Vassar College, Poughkeepsie, New York

JOAN D. GUSSOW, Department of Nutrition Education, Teachers College, Columbia University, New York, New York

JAMES R. KIRK, Research and Development, Campbell Soup Company, Camden, New Jersey

REYNALDO MARTORELL, Food Research Institute, Stanford University, Stanford, California

WALTER MERTZ, Human Nutrition Research Center, Agricultural Research Service, U.S. Department of Agriculture, Beltsville, Maryland

J. MICHAEL MCGINNIS, Office of Disease Prevention and Health Promotion U.S. Department of Health and Human Services, Washington, D.C.

MALDEN C. NESHEIM, Division of Nutritional Sciences, Cornell University, Ithaca, New York

RONALD C. SHANK, Department of Community and Environmental Medicine and Department of Pharmacology, University of California, Irvine, California

ROBERT H. WASSERMAN, Department/Section of Physiology, New York State College of Veterinary Medicine, Cornell University, Ithaca, New York

MYRON WINICK, Institute of Human Nutrition, College of Physicians and Surgeons, Columbia University, New York, New York

Staff

SUSHMA PALMER, Executive Director, Food and Nutrition Board

A Tool to Assist in the
Identification of Food Chemical Usage Trends

The Committee on Food Additives Survey Data of the National Research Council's Food and Nutrition Board has developed an equation to be used to sort additive poundage data on the basis of the changes in reported poundages over the 12 years during which such data have been collected by food additive committees. Various analyses of poundage figures have been supplied to the Food and Drug Administration (FDA) by Research Council food additive committees as part of the overall task of maintaining the food additives data bank.

Collection of food chemical poundage figures through voluntary surveys can present problems when one attempts to relate poundage figures from one survey with those from another. The survey base--companies responding--can change from survey to survey. Even if the same companies respond, their corporate structures might change between surveys, so a sharp change in the poundage of a particular additive used could be due, not to a change in the amount of that additive in food, but rather to expand or decrease the product line. In addition to variations in poundage reporting, the interval between surveys varies.

One would expect poundage figures to change gradually over the years because of population increases, changes in the costs of interchangeable additives, introduction of new additives in classes of interchangeable additives, and changes in processing technology. But, there are many exceptions to that generality. For example, a sudden drop in usage may be due to regulatory action (as occurred in connection with some FD&C dyes and cyclamates) or consumer choice as in the case of salt. When a marked change in reported usage occurs, it is important to be aware of it, so that reasons for it can be identified.

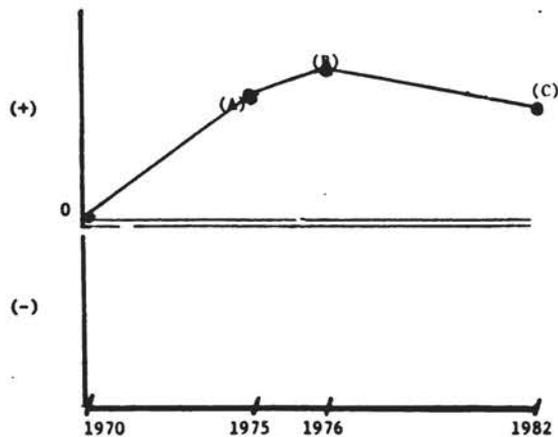
Research Council food additive committees have attempted to place reported poundages in perspective by reporting two figures for each additive: total poundage and matched poundage. Total poundage was the sum of all reported figures for a given additive, and matched poundage as the sum of figures for a given additive reported by identical companies in the surveys being compared. For example:

<u>Year</u>	<u>Substance</u>	<u>Companies Reporting</u>	<u>Total Poundage</u>	<u>Matched Poundage</u>
1970	X	A,B,C,D	1b for A+B+C+D	
1976	X	A,B,C,D,E,F,G	1b for A+B+C+D+E+F+G	1b for A+B+C+D

Consider the following example of data extracted from the 1982 survey report..

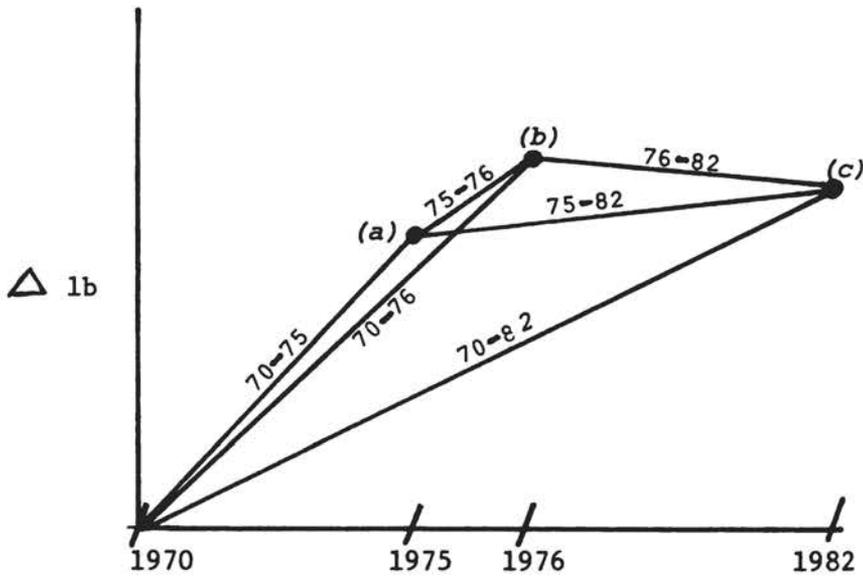
		Number of Matched Companies	Year			
			1970	1975	1976	1982
Total Companies			(24)	(9)	(16)	(28)
Total Pounds			66	42	11	82
			Matched Pounds			
Line	Year		1970	1975	1976	1982
1	70/75/76/82	4	11	18	20	16
2	70/75/82	7	42	41	--	54
3	75/76/82	4	--	18	20	26
4	70/76/82	5	21	--	24	26
5	70/82	8	46	--	--	58
6	75/82	7	41	--	--	54
7	76/82	5	--	--	24	26
8	70/75/76	4	17	26	20	--
9	70/75	9	62	42	--	--
10	75/76	4	--	16	20	--
11	70/76	5	21	--	24	--

If one plots matched poundage against survey year for Line 1, the following plot is obtained:



However, basing a growth plot on Line 1 ignores the fact that there are other possible matchings and the growth evaluation should consider the data from all companies responding, not only the four companies in Line 1.

Any attempt to retain a graphic solution while using all data lines quickly becomes unmanageable. Consider the plot:



Point A must be a function of the matched 70-75 poundages from Lines 1, 2, 8, and 9; and point B must be a function of matched poundages for 75-76 from Lines 1, 3, 8, and 10 and the matched poundages for 70-76 from Lines 1, 4, 8, and 11. Point C is even more complex.

To correlate the poundage data in a usable format, a mathematical approach is needed.

The Committee therefore suggests that the following derived equation be applied to poundage survey data for the calculation and sorting of changes in poundages of additives used.

Consider the following example applied to a single line of data:

<u>Matching Years</u>	<u>No Companies</u>	<u>Matched Poundage</u>			
		<u>1970</u>	<u>1975</u>	<u>1976</u>	<u>1982</u>
70/75/76/82	10	1b(1)	1b(2)	1b(3)	1b(4)

where lb(n) = poundage from survey n.

The change in disappearance (Δ) or usage between any two surveys can be expressed as:

$$\Delta = \text{dis}(2) - \text{dis}(1) = \frac{1b(2)}{\text{pop}(2)} - \frac{1b(1)}{\text{pop}(1)}$$

$$\Delta_{\text{rel}} = \frac{\frac{1b(2)}{\text{pop}(2)} - \frac{1b(1)}{\text{pop}(1)}}{\frac{1b(1)}{\text{pop}(1)}} = \left[\frac{\text{pop}(1)1b(2)}{\text{pop}(2)1b(1)} \right] - 1,$$

where dis(n) = disappearance at survey n, in lb per unit population,
 pop(n) = population at survey n,
 lb(n) = poundage for additive reported in survey, and
 Δ_{rel} = relative disappearance.

Calculating change in disappearance based on all possible combinations across the line yields

$$\begin{aligned} \Delta &= \left[\left(\frac{\text{pop}(70)1b(75)}{\text{pop}(75)1b(70)} - 1 \right) + \left(\frac{\text{pop}(70)1b(76)}{\text{pop}(76)1b(70)} - 1 \right) + \left(\frac{\text{pop}(70)1b(82)}{\text{pop}(82)1b(70)} - 1 \right) \right. \\ &+ \left. \left(\frac{\text{pop}(75)1b(76)}{\text{pop}(76)1b(70)} - 1 \right) + \left(\frac{\text{pop}(75)1b(82)}{\text{pop}(82)1b(75)} - 1 \right) + \left(\frac{\text{pop}(76)1b(82)}{\text{pop}(82)1b(76)} - 1 \right) \right] \\ &= \sum \text{relative disappearance changes across all surveys.} \end{aligned}$$

The summation of the individual relative changes in disappearance, however, does not take into account the amounts of the additive being reported; therefore, a 100-fold change in disappearance of an additive that has national usage of 25 lbs and a 100-fold change for one with usage of 5 million pounds have equal weight. The equation also does not account for different intervals between surveys.

Taking different intervals into account normalizes disappearance changes to 1-year steps. Modifying the equation to acknowledge that the amount of an additive used has an effect on the importance of a disappearance change makes it incorrect to call the results obtained using the equation simply changes in disappearance. Therefore, the Trend Factor (TF) is introduced:

$$TF = \frac{\sum_{n=1}^n \frac{(\text{rel. dis} \times \text{meanlb})_1}{\Delta t_1} + \frac{(\text{rel. dis} \times \text{meanlb})_2}{\Delta t_2} + \dots + \frac{(\text{rel. dis} \times \text{meanlb})_n}{\Delta t_n}}{\sum_{n=1}^n (\text{meanlb})_1 + (\text{meanlb})_2 + \dots + (\text{meanlb})_n}$$

where relative change in disappearance (rel. Δ dis) = $\frac{\text{pop}(1)\text{lb}(2)}{\text{pop}(2)\text{lb}(1)} - 1$

mean poundage (meanlb)_n = $\frac{\text{lb}(\text{yr } 1) + \text{lb}(\text{yr } 2)}{2}$, and

Δ t_n = time between surveys.

Calculation of an actual TF for an additive, however, requires two more modifications: an iteration of the above equation so that a TF is calculated for all data lines (as in the preceding calculation of Δ) and a method to avoid multiple countings of the same matched poundages as the iteration moves from Line 1 to Line 11. A computer program was designed to carry out the calculation of TF values, taking into account all the variables presented.

The equation was tested by applying it to a set of test data obtained by generating poundage growth and poundage reduction figures over four steps. Each step simulated a survey. To obtain the maximal variation in poundage growth or reduction, we varied both the rate of change and the initial poundage.

As one might suspect, there is no limitation on the positive TF value calculated with the equation. However, a TF of 3 corresponds to a growth of 10,000%, so there are practical limitations.

There is a real limit of -0.2 for a negative TF value. If one assumes the most severe case in which usage decreases from some finite value in the first survey (1970) to 0 in the 1975 survey, then

$$TF = \left\{ \frac{\text{pop}(70)\text{lb}(75)}{\text{pop}(75)\text{lb}(70)} - 1 \right\} (\text{Mean Poundage}).$$

For 1970/1975 comparisons, $\frac{\text{pop}(70)}{\text{pop}(75)} = 0.99$ and $\Delta t = 5$.

If the poundage for 1975 decreases to 0, then $\frac{\text{lb}(75)}{\text{lb}(70)} = 0$ and

$$TF = \frac{\left\{ \frac{(0.99)(0)}{5} - 1 \right\} \left[\frac{\text{lb}(70) + \text{lb}(75)}{2} \right]}{\frac{\text{lb}(70) + \text{lb}(75)}{2}} = -0.2$$

A distribution of TF values for a sample of the 1982 poundage survey appears in Appendix A as well as a complete listing of TF values (Appendix B).

In conclusion, the equation can be used to analyze poundage data on food chemicals whose usage is reported by the food industry. The TF values can then be used to rank-order food chemicals in terms of the magnitude of changes in usage.

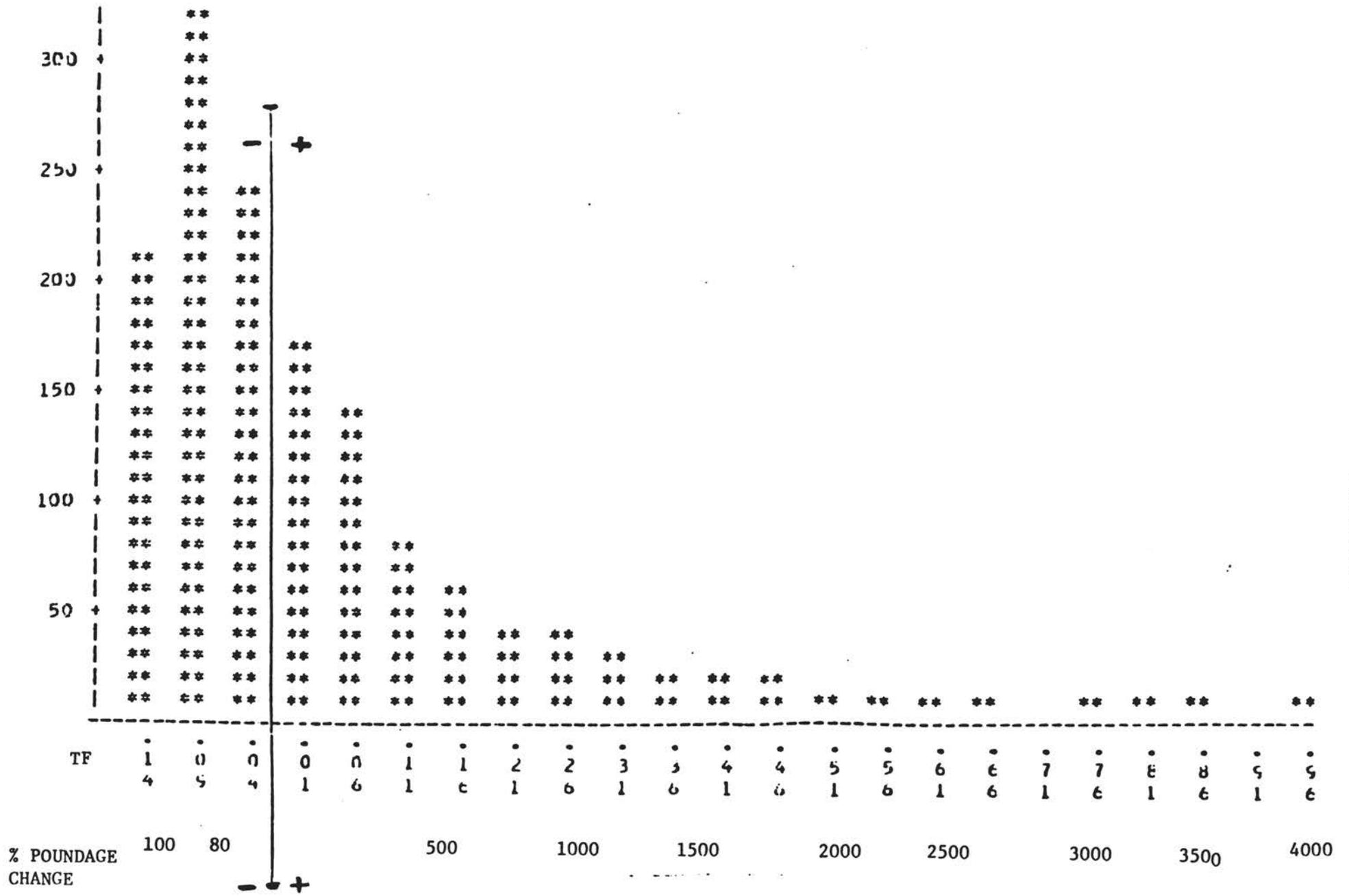
Although a change in the amount of a food chemical being used might be a key factor in many decisions, the user is cautioned that the equation:

- Yields a factor, TF, that is useful only in comparisons with other TF values calculated the same way.
- Cannot be used by itself to assess changes in the safety of the food supply.
- Provides no information on the reasons for changes in the usage of food additives.

HORIZONTAL AXIS - FIRST LINE, TF VALUES
 SECOND LINE, % CHANGE IN POUNDAGE

FREQUENCY

VERTICAL AXIS - FREQUENCY OF TF VALUE



UBS NO.	TF VALUE	SUBSTANCE
001	.01-	ACACIA, ACACIA GUM
002	.29	ACETAL
003	1.43	ACETALDEHYDE
004	.29	ACETALDEHYDE PHENETHYL PROP
005	.04-	ACETANISOLE
002	.06	ACETIC ACID
007	.13	(TRI-)ACETIN
008	.10	ACETOIN
026	.13	ACETONE
009	.04-	ACETOPHENONE
030	.14	ACETYLATED MONOGLYCERIDES
091	.63	3-ACETYL-2,5-DIMETHYLFURAN
027		3-ACETYL-2,5-DIMETHYLTHIOPHENE
126	.53	ACETYLPYRAZINE
251	.32	2-ACETYLPYRIDINE
424	.30	3-ACETYLPYRIDINE
328	.07-	2-ACETYL THIAZOLE
026	5.83	ACRYLAMIDE-ACRYLIC ACID RESIN (HYDROLYZED POLYACRYLAMIDE)
416	.09-	ACRYLATE, ETHYL
003	.05-	ADIPIC ACID
004	.27	AGAR-AGAR
005	.74	DL-ALANINE
006		L-ALANINE
252	-	BS-ALANINE
413		ALBUMIN
170	.01-	ALFALFA, HERB AND SEED (MEDICAGO SATIVA L.)
015	.12	ALGINATES, SODIUM, CALCIUM, AND AMMONIUM
014	9.34	ALGIN (LAMINARIA SPP. AND OTHER KELPS)
017	.01	ALLSPICE
018	.00-	ALLSPICE, OIL
019	.09-	ALLSPICE, OLEORESIN
033	.01	ALLYL A β -IONONE
021	.12-	ALLYL BUTYRATE
032	-	ALLYL HEXANOATE
022	.07-	ALLYL CINNAMATE
026	.08-	ALLYL CYCLOHEXANEPROPIONA
030	.13-	ALLYL 2-FUROATE
031	.07	ALLYL HEPTANOATE
034	-	ALLYL ISOTHIOCYANATE
045	.15-	ALLYL ISOVALERATE
035	.04-	ALLYL MERCAPTAN
037	.11-	ALLYL OCTANOATE
038	.14	ALLYL PHENOXYACETATE
044	.13-	ALLYL 1-UNDECENOATE
522	.40	ALMOND, OIL
046	.01-	ALMOND OIL, BITTER, FEMA
522		ALMONDS
229	.03-	DL-ALPHA TOCOPH ACET
228	4.26	D-ALPHA TOCOPH ACET
231	.08-	D-ALPHA TOCOPH ACID SUCC
226	.14-	DL-ALPHA TOCOPHEROL
006	.14-	ALUMINUM AMMONIUM SULFATE

UBS NO.	TF VALUE	SUBSTANCE
009	.30	ALUMINUM POT SULFATE
010	.11-	ALUMINUM SODIUM SULFATE
011	.12-	ALUMINUM SULFATE
049	.08-	AMBERGRIS, TINCTURE
050	.07-	AMBRETTE, ABSOLUTE, OIL (HIBISCUS ABELMOSCHUS L.)
051	.07-	AMBRETTE SEED, OIL (HIBISCUS ABELMOSCHUS L.)
445		DL-(3-AMINO-3-CARBOXYPROPYL)DIMETHYLSULFONIUM CHLORIDE
528	.03-	AMMONIATED GLYCHERRIZIN
013	.03	AMMONIUM BICARBONATE
014	3.41	AMMONIUM CARBONATE
344	.00	AMMONIUM CHLORIDE
417	.28	AMMONIUM CITRATE
015	.12	AMMONIUM HYDROXIDE
054	.20	AMMONIUM ISOVALERATE
732		AMMONIUM PERSULFATE
016	.03	AMMONIUM PHOSPHATE, DIBASIC
017	.15-	AMMONIUM PHOSPHATE MONO
019	.05	AMMONIUM SULFATE
056	.09-	AMYL ALCOHOL
450		AMYLASE, BACTERIAL
059	.09	AMYL BUTYRATE
062	.07-	A&B-AMYLCINNAMALDEHYD DIME
061	.06	A&B-AMYLCINNAMALDEHYDE
064	.07-	A&B-AMYLCINNAMYL ACETATE
065	.02	A&B-AMYLCINNAMYL ALCOHOL
068	.03	AMYL FORMATE
072	.10-	AMYL 2-FUROATE
073	.13-	AMYL HEPTANOATE
074		AMYL HEXANOATE
417	.12-	AMYL ISOVALERATE
079	.26	AMYL OCTANOATE
415	.12-	AMYL PHENYLACETATE
007	.21	AMYL SALICYLATE
004	.04-	AMYRIS (AMYRIS BALSAMIFERA L.)
005	.90	AMYRIS, OIL (AMYRIS BALSAMIFERA L.)
086	.07-	ANETHOLE
172	.03	ANGELICA ROOT (ANGELICA SPP.)
087	.25	ANGELICA ROOT, EXTRACT (ANGELICA ARCHANGELICA L.)
088	.03-	ANGELICA ROOT, OIL (ANGELICA ARCHANGELICA L.)
089	.12-	ANGELICA SEED, EXTRACT (ANGELICA ARCHANGELICA L.)
092	.11	ANGOSTURA, EXTRACT (GALIPEA OFFICINALIS HANCOCK)
094		ANISE, OIL (PIMPINELLA ANISUM L.)
093	.09	ANISE (PIMPINELLA ANISUM L.)
095	.03	ANISE, STAR (ILLICIIUM VERUM HOOK, F.)
096	.03-	ANISE, STAR, OIL (ILLICIIUM VERUM HOOK, F.)
097	.10-	ANISOLE
098		ANISYL ACETATE
099	.03-	ANISYL ALCOHOL
100	.08-	ANISYL BUTYRATE
101	.04	ANISYL FORMATE
007	.23-	ANISYL PHENYLACETATE
102	.06-	ANISYL PROPIONATE

SUBS NO	TF VALUE	SUBSTANCE
5602	.05-	ANNATTO EXTRACT
2104	.01-	ANNATTO, SEED
5601	2.24	B β -APO-8'-CAROTENAL
4544	.03	APPLE ESSENCE, NATURAL
2105	.13-	APRICOT KERNEL, OIL (PRUNUS ARMENIACA L.)
3254	.14	ARABINOGALACTAN
3255	.02-	L-ARABINOSE
4575		L-ARABINOSE/PECTIN/SUGAR
0021		L-ARGININE
4256	.05-	ARNICA, FLOWERS
2106	.81	ASAFETIDA, FLUID EXTRACT (FERULA ASSAFOETIDA L.)
2107	4.16	ASAFETIDA, GUM (FERULA ASSAFOETIDA L.)
2108	.08-	ASAFETIDA, OIL (FERULA ASSAFOETIDA L.)
0022	.04	ASCORBIC ACID
0023	2.10	ASCORBYL PALMITATE
4258	1.17	ASPARAGUS, SEED/ROOT EXT
5016		ASPARTAME
0025		L-ASPARTIC ACID
0496	4.62	AZODICARBONAMIDE
2113	.10-	BALM, OIL
2114	.05-	BALSAM FIR, OIL
2115	.13-	BALSAM FIR, OLEORESIN
2116	.14	BALSAM, PERU
2117	.02-	BALSAM, PERU, OIL
3578		BANANA, PURE, CONC.
0527		BARLEY FLOUR
5175		BASIL BUSH (OCIMUM MINIMUM L.)
2118	.21	BASIL (OCIMUM BASILICUM L.)
2119	.05	BASIL, OIL (OCIMUM BASILICUM L.)
2120	.19	BASIL, OLEORESIN (OCIMUM BASILICUM L.)
4531		BAY LEAF
2121	.13-	BAY LEAVES, WEST INDIAN, EXTRACT (PIMENTA ACRIS KOSTEL)
2122	.04-	BAY LEAVES, WEST INDIAN, OIL (PIMENTA ACRIS KOSTEL)
2124	-	BAY, SWEET (LAURUS NOBILIS L.)
2125	.25	BAY, SWEET. OIL (LAURUS NOBILIS L.)
4259	.09-	BEECHWOOD CREOSOTE
0366		BEEF EXTRACT
0026	.12-	BEESWAX
0027	.08-	BEESWAX, BLEACHED
4554		BEET POWDER
5613	.27	BEET POWDER (DEHYDRATED BEETS)
0028	.16	BENTONITE
2127	.04	BENZALDEHYDE
2128	.11-	BENZALDEHYDE DIME ACETAL
2129	.13	BENZALD. GLYCERYL ACETAL
2130	.03	BENZALD PROPYLENE GLYC
3616	.07-	BENZENETHIOL
2131	.48	BENZOIC ACID
2132	.11-	BENZOIN
2133		BENZOIN, RESIN
2134	.01-	BENZOPHENONE
3256	.03-	BENZOTHIAZOLE

SUBS NO.	TF VALUE	SUBSTANCE
1254	.02	BENZOYL PEROXIDE
135	.06-	BENZYL ACETATE
136	.10-	BENZYL ACETOACETATE
137	.12	BENZYL ALCOMOL
138		BENZYL BENZOATE
140	.20	BENZYL BUTYRATE
142	.03-	BENZYL CINNAMATE
147	.12-	BENZYL DISULFIDE
145	.35	BENZYL FORMATE
140	.13-	3-BENZYL-4-HEPTANONE
141	.13-	BENZYL ISOEUTYRATE
1519	.84	BENZYL ISOEUGENOL
152	.03-	BENZYL ISOVALERATE
147	.12-	BENZYL MERCAPTAN
149	.13-	BENZYL PHENYLACETATE
150	.12-	BENZYL PROPIONATE
151	.12-	BENZYL SALICYLATE
3330	.16-	BENZYL TRANS-2-METHYL-2-BUTENOATE
153	.06-	BERGAMOT, OIL
030	.01	BIOTIN
129	.10-	BIPHENYL
154	.07-	BIRCH, SWEET, OIL
013	.25	BIRCH TAR, OIL (BETULA PENDULA ROTH AND RELATED BETULA SPF
3331	10.73	BISABOLENE
3257	2.73	BIS(2-FURFURYL) DISULFIDE
155	.13-	BLACKBERRY BARK, EXT
3680		BLACKBERRY, FRUIT, EXT.
7513	.05-	BLACK RASPBERRY EXTRACT
5616	.10	BLENDS OF NON-CERTIFIED COLORS
0401		BLUE CHEESE FLAV, FERMENT
5307	.06	BOILER WATER ADDITIVES
156	.11-	BOIS DE ROSE, OIL
157	.07-	BORNEOL
159	.15	BORNYL ACETATE
161	.11-	BORNYL FORMATE
165	.12-	BORNYL ISOVALERATE
167	.06-	BORONIA, ABSOLUTE
256	.17-	BOUILLON, VEGET, SMOKED
0308		BROMELAIN
168	.07-	BROMINATED VEGETABLE OIL
3655		BUCHU LEAVES EXT.
169	.03-	BUCHU LEAVES, OIL
3477	.11-	2,3-BUTANEDITHIOL
170		2-BUTANONE
3332		BUTAN-3-ONE-2-YL BUTANOATE
171	.10	BUTTER ACIDS
172	.07-	BUTTER ESTERS
258	.01	BUTTER FAT, ENZYME MODIFIED
519		BUTTERMILK POWDER
173	.02	BUTTER STARTER DIST
174	.01-	BUTYL ACETATE
178	.41	BUTYL ALCOHOL

SUBS NO	TF VALUE	SUBSTANCE
2181	.02-	BUTYL ANTHRANILATE
5021	.05-	BUTYLATED HYDROXYANISOLE
5022	.11-	BUTYLATED HYDROXYTOLUENE
3392	.06-	2-BUTYL-2-BUTENAL
2186	.06-	BUTYL BUTYRATE
2190	.63	BUTYL BUTYRLACTATE
2191	.09-	AR-BUTYLCINNAMALDEHYDE
2192	.11-	BUTYL CINNAMATE
2194	.13-	BUTYL 2-DECENOATE
3619		2-(2-BUTYL)-4,5-DIMETHYL-3-THIAZOLINE
7068	.06	1,3-BUTYLENE GLYCOL
531	.04-	BUTYLENE GLYCOL
2195	.13-	BUTYL ETHYL MALONATE
2196	.01-	BUTYL FORMATE
2201	.13-	BUTYL HEXANOATE
3333	.17-	3-BUTYLIDENEPHTHALIDE
2188	.10-	BUTYL ISOBUTYRATE
2218	.04	BUTYL ISOVALERATE
2206	.13-	BUTYL LAURATE
2207	.01	BUTYL LEVULINATE
3393		N-BUTYL 2-METHYLBUTYRATE
2209	.10-	BUTYL PHENYLACETATE
3334	.13-	3-N-BUTYLPHTHALIDE
2211	.10-	BUTYL PROPIONATE
5027	.06-	BUTYL STEARATE
2216	3.52	BUTYL 10-UNDECENOATE
2217	8.71	BUTYL VALERATE
2219		BUTYRALDEHYDE
2221	.03	BUTYRIC ACID
2223	.09-	(TRI-)BUTYRIN
5019	.09	CADINENE
0034	.04	CAFFEINE
2225	.11-	CAJEPUT, OIL
0035	10.06	CALCIUM ACETATE
0036	.20-	CALCIUM ALGINATE
0038	.01	CALCIUM CARBONATE
0556		CALCIUM CASEINATE
0039	.10	CALCIUM CHLORIDE
0040	.07-	CALCIUM CITRATE
0532	.09	CALCIUM DISODIUM EDTA (2 H2O)
0041	.11-	CALCIUM GLUCONATE
0042		CALCIUM GLYCEROPHOSPHATE
0044	.11	CALCIUM HYDROXIDE
0049	.37	CALCIUM IODATE
0045	.09-	CALCIUM LACTATE
0046	.01-	CALCIUM OXIDE
0037	-	CALCIUM PANTOTHENATE, CALCIUM CHLORIDE DOUBLE SALT
0040		CALCIUM PEROXIDE
0048	.19	CALCIUM PHOSPHATE, DIBASIC
0049	-	CALCIUM PHOSPHATE, MONOBASIC
0050	-	CALCIUM PHOSPHATE, TRIBASIC
0052	.04	CALCIUM PROPIONATE

SUBS NO	TF VALUE	SUBSTANCE
1055	.08-	CALCIUM SILICATE
1260	.01-	CALCIUM STEARATE
1538	.02	CALCIUM STEAROYL-2-LACTYLATE
1057	.05	CALCIUM SULFATE
1229	.04-	CAMPHENE
1230	.02-	d-CAMPHOR
1231	.12-	CAMPHOR, JAP, WHITE, OIL
1232	.02-	CANANGA, OIL
1479	.10-	CANDELILLA WAX (WAX FROM STEMS AND BRANCHES OF EUPHORBIA
1615	3.91	CANTHAXANTHIN
1179	.10-	CAPERS (CAPPARIS SPINOSA L.)
1058	.40	CAPRYLIC ACID
1180	.03	CAPSICUM (CAPSICUM FRUTESCENS L. OR CAPSICUM ANNUUM L.)
1233	.19-	CAPSICUM EXTRACT (CAPSICUM SPP.)
1234	-	CAPSICUM, OLEORESIN (CAPSICUM SPP.)
1059	.01	CARAMEL
1441	.07-	CARAMEL LIQUID
1051		CARAMEL POWDER
1236		CARAWAY
1236	.06-	CARAWAY, OIL
1262	2.53	CARBON
1701	.07-	CARBON (ACTIVATED)
1060	.68	CARBON DIOXIDE
1533		CARBOWAX
1263	.97	CARBOXYMETHYLCELLULOSE
1240	.12	CARDAMOM
1501		CARDAMOM, OLEORESIN
1241	.02-	CARDAMOM SEED, OIL
1242	.20-	CARMINE
1061	.26	CARNAUBA WAX
1063	.22	B β -CAROTENE
1046	-	CARRAGEENAN
1049	.04-	CARRAGEENAN, CALCIUM SALT OF
1047	.10	CARRAGEENAN SALTS
1051	.05-	CARRAGEENAN, SODIUM SALT OF
1596	.08-	CARRAGEEN EXTRACT (CHONDRUS EXTRACT)
1614	-	CARROT OIL
1245	.06-	CARVACROL
1246	.09-	CARVACRYL ETHYL ETHER
1247	.05-	CARVEOL
1248	.11	4-CARVOMENTHENOL
1249	.26	CARVONE
1250	.02-	CARVYL ACETATE
1251	.07-	CARVYL PROPIONATE
1252	.01	B β -CARYOPHYLLENE
1267	.06-	B β -CARYOPHYLLENE ALCOHOL
1023	5.05	CARYOPHYLLENE ALCOHOL
1488	.01-	CARYOPHYLLENE OXIDE
1253	.83	CASCARA, BITTERLESS, EXTRACT (RHAMNUS PURSHIANA DC.)
1254	.06	CASCARILLA BARK, EXT
1255	.41	CASCARILLA BARK, OIL
1422	.19	CASEIN

SUBS NO	TF VALUE	SUBSTANCE
257	.09-	CASSIA BARK, EXTRACT (CINNAMOMUM CASSIA BLUME)
253	-	CASSIA BARK, OIL (CINNAMOMUM CASSIA BLUME)
259	.12-	CASSIA BUDS (CINNAMOMUM CASSIA BLUME)
256	1.00	CASSIA (CINNAMOMUM CASSIA BLUME)
161	.02	CASSIA, PADANG OR BATAVIA (CINNAMOMUM BURMANNI BLUME)
182	.55	CASSIA, SAIGON (CINNAMOMUM LOUREIRII NEES)
260	2.68	CASSIE, ABSOLUTE (ACACIA FARNESIANA (L.) WILLD.)
261	.00-	CASTOREUM, EXTRACT
262	.04	CASTOREUM, LIQUID
058	.65	CASTOR OIL
264	.11-	CATECHU, EXTRACT
265	.13-	CATECHU, POWDER
266	.14	CAYENNE (CAPSICUM ANNUUM L. VAR. LONGUM SENDT)
267	.05-	CEDAR LEAF, OIL
270	.07	CEDARWOOD OILS, ALC/TERP
271	.10-	CEDRYL ACETATE
268	.01-	CELERY SEED (APIUM GRAVEOLENS L)
269	.03-	CELERY SEED, EXTRACT (APIUM GRAVEOLENS L.)
270	.05	CELERY SEED, EXTRACT SOLID (APIUM GRAVEOLENS L.)
271	.02-	CELERY SEED, OIL (APIUM GRAVEOLENS L.)
513	.14-	CELERY SEED, OLEORESIN
265	.20	CELLULOSE
505		CELLULOSE, MICROCRYSTALLINE
029	.07	CENTAURY (CENTAURIUM UMBELLATUM GILIB)
272	.03-	CHAMOMILE FLOWER, ENGLISH, OIL (ANTHEMIS NOBILIS L.)
273	.11-	CHAMOMILE FLOWER, HUNGARIAN, OIL (MATRICARIA CHAMOMILLA L.)
274	.10-	CHAMOMILE FLOWER, ROMAN, EXTRACT (ANTHEMIS NOBILIS L.)
275	.07-	CHAMOMILE FLOWER, ROMAN, OIL (ANTHEMIS NOBILIS L.)
440		CHAR SMOKE FLAVOR
517		CHEDDAR CHEESE
276	.09	CHERRY BARK, WILD, EXTRACT (PRUNUS SEROTINA EHRH.)
277	.18	CHERRY LAUREL OIL, FFPA
278	.06-	CHERRY PITS, EXTRACT
033	-	CHESTNUT LEAVES, EXTRACT (CASTANEA DENTATA (MARSH.) BORKH.)
034	.15	CHESTNUT LEAVES, EXTRACT SOLID (CASTANEA DENTATA (MARSH.)
061		CHEWING GUM BASE
280	.01	CHICORY, EXTRACT (CICHORIUM INTYBUS L.)
515	1.12	CHILI CAPSICUM
517	.05-	CHILIES, GROUND
533		CHILI SWEET
035	.14-	CHIRATA (SWERTIA CHIRATA BUCH.-HAM.)
186	.23	CHIVES (ALLIUM SCHOENOPRASUM L.)
424	.02-	CHLORINE
425		CHLORINE DIOXIDE
706	.01-	CHLORINE, LIQUID
266	.02-	CHLOROPHYLL
065	.05-	CHOLINE BITARTRATE
066	1.50	CHOLINE CHLORIDE
281	5.15	CINCHONA BARK, RED (CINCHONA SUCCIRUBRA PAV. OR ITS HYBRID
282	.16	CINCHONA BARK, RED, EXT
284	.08-	CINCHONA BARK, YEL, EXT
283	.59	CINCHONA BARK, YELLOW

SUBS NO	TF VALUE	SUBSTANCE
2265	.07-	CINCHONA, EXTRACT
4275	.01	1,4-CINEOLE
2227	.09-	CINNAMALDE ETHYLENE GLYOL
2286	.02	CINNAMALDEHYDE
2288	.04	CINNAMIC ACID
7502		CINNAMON BARK
2290	.08	CINNAMON BARK, EXT
2291	.01	CINNAMON BARK, OIL
2289	.06-	CINNAMON (CINNAMOMUM SPP)
2292	.02	CINNAMON LEAF, OIL
5518	.01-	CINNAMON, OLEORESIN
2293	.02	CINNAMYL ACETATE
2294	.05	CINNAMYL ALCOHOL
4276	.11-	CINNAMYL BENZOATE
2296	.32	CINNAMYL BUTYRATE
2298	.04-	CINNAMYL CINNAMATE
2299	.14	CINNAMYL FORMATE
2297	.01	CINNAMYL ISOBUTYRATE
2302	.05-	CINNAMYL ISOVALERATE
2300	.11-	CINNAMYL PHENYLACETATE
2301	.01	CINNAMYL PROPIONATE
2303	.05	CITRAL
2304	.06-	CITRAL DIETHYL ACETAL
2305	-	CITRAL DIMETHYL ACETAL
4277	.13-	CITRAL PROP GLY ACETAL
0068	.07	CITRIC ACID
2307	.42	CITRONELLAL
2308	.12-	CITRONELLA, OIL
3142	.09-	CITRONELLIC ACID
2309	.12-	DL-CITRONELLOL
2310	.14-	CITRONELLOXYACETALDEHYDE
2311	.16	CITRONELLYL ACETATE
2312	.03	CITRONELLYL BUTYRATE
2314	.09-	CITRONELLYL FORMATE
2313	.64	CITRONELLYL ISOBUTYRATE
2316	.09-	CITRONELLYL PROPIONATE
2318	.13-	CITRUS PEELS, EXTRACT
5401	.12-	CITRUS RED NO. 2
2319	.10-	CIVET, ABSOLUTE
2320	.08-	CLARY
2321	.07-	CLARY, OIL
0267	.17-	CLAY (ATTAPULGITE)
2322	.24	CLOVE BUD, EXTRACT
2323	.06	CLOVE BUD, OIL (EUGENIA SPP)
2324	-	CLOVE BUD, OLEORESIN
2325	.08	CLOVE LEAF, OIL
2326	.17-	CLOVER TOPS, RED, EXTRACT SOLID (TRIFOLIUM PRATENSE L.)
2327	.08	CLOVES
2328	.08-	CLOVE STEM, OIL
5315	.07	COBALT SULFATE (7 H2O)
2329		COCA LEAF, EXTRACT
2330	.14-	COCHINEAL

SUBS NO	TF VALUE	SUBSTANCE
511	.05-	COCHINEAL EXTRACT; CARMINE
371	.04	COCOA
372		COCOA BUTTER
278	.03-	COCOA EXTRACT
373		COCONUT, OIL
636	.11-	COFFEE CONCENTRATE-PURE
192	.30	COFFEE, EXTRACT (COFFEA SPP.)
331	.03-	COGNAC, GREEN, OIL
332	.02-	COGNAC, WHITE, OIL
426		CONFECTIONERS GLAZE
041	-	COPAIBA, OIL (SOUTH AMERICAN SPP. OF COPAIFERA L.)
040	.07	COPAIBA (SOUTH AMERICAN SPP. OF COPAIFERA L.)
069	.12	COPPER GLUCONATE
427	.03-	COPPER SULFATE (5 H2O)
333		CORIANDER (CORIANDRUM SATIVUM L.)
334	.01	CORIANDER, OIL (CORIANDRUM SATIVUM L.)
062		CORN FLOUR
548		CORN GRITS
504		CORN MEAL
259		CORNMINT OIL
374	.16-	CORN OIL
190	.27	CORN SILK, EXTRACT (ZEA MAYS L.)
335	.12-	CORN SILK (ZEA MAYS L.)
375	.34	CORN SYRUP SOLIDS
336	.08-	COSTUS ROOT, OIL
376		COTTONSEED, OIL
717		COTTONSEED OIL, PARTIALLY HYDROGENATED
708	.01-	COTTONSEED STEARINE, FULLY HYDROGENATED
066	.06-	COUMARONE-INDENE RESIN
337	.05-	P ₂ -CRESOL
530	.12-	M-CRESOL
339	.02-	CUBEBS, OIL
341	.07-	CUMINALDEHYDE
342	.66	CUMIN, BLACK (NIGELLA SATIVA L.)
340	.08	CUMIN (CUMINUM CYMINUM L.)
343	.42	CUMIN, OIL (CUMINUM CYMINUM L.)
344	.16	CURACAO PEEL, EXT
345	.11-	CURACAO PEEL, OIL
346	.79	CURRENT BUDS, BLACK, ABSOLUTE (RIBES NIGRUM L.)
661		CURRENT JUICE, BLACK
347	.12	CYCLOHEXANEACETIC ACID
531		CYCLOHEXANECARBOXYLIC ACID
349	3.94	CYCLOHEXYL ACETATE
319	1.15	CYCLOHEXYLAMINE
350	.13-	CYCLOHEXYL ANTHRANILATE
351	.12-	CYCLOHEXYL BUTYRATE
355	.08-	CYCLOHEXYL ISOVALERATE
356	.15	P ₂ -CYMENE
242	.03-	P ₂ -CYMENOL-8
263	.05-	L-CYSTEINE
002	.07	L-CYSTEINE MONOHYDROCHLORIDE (1 H2O)
073		L-CYSTINE

SUBS NO	TF VALUE	SUBSTANCE
072	1.03	DL-CYSTINE
503	.14-	DAMAR GUM
022		Gδ-DAMASCONONE
288	.12-	DAMIANA, LEAVES
358	.17	JANDELION ROOT, EXT SOLID
359	1.32	DAVANA, OIL (ARTEMISIA PALLENS WALL.)
135	1.30	2-TRANS,4-TRANS-DECADIENAL
300	.27	E8-DECALACTONE
361	.43	G8-DECALACTONE
362	.08	DECANAL
363	.10-	DECANAL DIMETHYL ACETAL
364	.55	DECANOIC ACID
365	.00-	1-DECANOL
366		2-DECENAL
532	.01-	3-DECEN-2-ONE
367	.11-	DECYL ACETATE
009	.07	DEFOAMING AGENTS (AND COMPONENTS)
338	1.26	DEXTRINS
271	.03-	DEXTROSE
557		DEXTROSE SYRUP
370	.05	DIACETYL
076	.02	DIACETYL TARTARIC ACID ESTERS OF MONO- AND DIGLYCERIDES
028	.11	DIALLYL DISULFIDE
533		DIALLYL POLYSULFIDE
042	.01	DIALLYL SULFIDE
272	.01	DIATOMACEOUS EARTH
371	.15	DIBENZYL ETHER
215	.11-	DIBUTYL SULFIDE
448		DICYCLOHEXYL DISULFIDE
374	.46	DIETHYL MALATE
375	.19	DIETHYL MALONATE
536	.13-	2,3-DIETHYL-5-METHYLPYRAZINE
136	.01-	2,3-DIETHYLPYRAZINE
376	.02-	DIETHYL SEBACATE
377	.78	DIETHYL SUCCINATE
337	.07-	DIFURFURYL ETHER
379	.11-	DIHYDROCARVEOL
380	.09-	DIHYDROCARVYL ACETATE
381	.08-	DIHYDROCOUMARIN
206	.16-	4,5-DIHYDRO-3(2H)THIOPHENONE
338		5,7-DIHYDRO-2-METHYLTHIENO(3,4-D)PYRIMIDINE
362	.11	DILL
383	.03	DILL, OIL
384	.08-	DILL SEED, INDIAN
504	.11	DILL WEED OIL
306	.06-	pα-DIMETHOXYBENZENE
385	.12-	mα-DIMETHOXYBENZENE
426	4.02	1,1-DIMETHOXYETHANE
137	.01-	2,6-DIMETHOXYPHENOL
387	.41	2,4-DIMETHYLACETOPHENONE
207	.09-	2,4-DIMETHYL-5-ACETYLTIAZOLE
208	.23	3,4-DIMETHYL-1,2-CYCLOPENTADIONE

SUBS NO	TF VALUE	SUBSTANCE
1269	.03-	3,5-DIMETHYL-1,2-CYCLOPENTADIONE
1450		2,5-DIMETHYL-2,5-DIHYDROXY-1,4-DITHIANE
1536	.10-	DIMETHYL DISULFIDE
1389	.05	2,6-DIMETHYL-5-HEPTENAL
1391	.04	3,7-DIMETHYL OCTANOL-1
1539		3,7-DIMETHYL-1,3,6-OCTATRIENE
1392	3.57	A8-DIMETHYLPHENETHYL ACET
1393	.12-	A8-DIMETHYLPHENETHYL ALCO
1394	.01-	A8-DIMETHYLPHENETHYL BUTY
1071	.79	DIMETHYLPOLYSILOXANE
1271	4.18	2,3-DIMETHYLPYRAZINE
1273	.81	2,5-DIMETHYLPYRAZINE
1272	.50	2,5-DIMETHYLPYRAZINE
1396	.15	DIMETHYL SUCCINATE
1746	.86	DIMETHYL SULFIDE
1274		4,5-DIMETHYLTHIAZOLE
1541	.11-	3,5-DIMETHYL-1,2,4-TRITHIOLANE
1542	.12-	6,10-DIMETHYL-5,9-UNDECADIEN-2-ONE
1072	.17-	DIOCTYL SODIUM SULFOSUCCINATE
1397	.06-	1,3-DIPHENYL PROPANONE-2
1731	.01-	DIPOTASSIUM FERROUS FERROCYANIDE
1276	.24	DIPROPYL TRISULFIDE
1537	.05	DISODIUM EDTA (2 H2O)
1017	.15	DISODIUM GUANYLATE
1018	.02	DISODIUM INOSINATE
1277	.33	DISODIUM SUCCINATE
1610		D8-DODECALACTONE
1400	.39	E8-DODECALACTONE
1401	2.65	G8-DODECALACTONE
1402	.29	2-DODECENAL
1403	5.17	DOGGRASS, EXTRACT
1549		DURUM FLOUR
1550		DURUM GRANULAR
1193		ELDER FLOWERS EXTRACT (SAMBUCUS CANADENSIS L. AND S. NIGRA
1406	.20	ELDER FLOWERS (SAMBUCUS CANADENSIS L. OR SAMBUCUS NIGRA L.
1294	.05-	ELECAMPANE, RI&IZ/ROOT
1407	.13-	ELEMI, GUM
1408	.01-	ELEMI, OIL
1073	.09-	ENZYMES, BACTERIAL
1074	.03-	ENZYMES, PROTEOLYTIC
1078	1.15	ERYTHROBIC ACID
1411	.07-	ESTRAGOLE
1412	.05-	ESTRAGON, OIL
1413	2.05	P-ETHOXYBENZALDEHYDE
1076	.07	ETHOXYLATED MONO- AND DIGLYCERIDES
1077	.15-	ETHOXYQUINONE
1414	.01-	ETHYL ACETATE
1415	.24	ETHYL ACETOACETATE
1417	.24	ETHYL ACONITATE
1377	.01	ETHYL ALCOHOL
1421	.07-	ETHYL ANTHRANILATE
1422	.05	ETHYL BENZOATE

SUBS NO	TF VALUE	SUBSTANCE
425	.31-	2-ETHYLBUTYL ACETATE
426	.07-	2-ETHYLBUTYRALDEHYDE
427	.13	ETHYL BUTYRATE
429	.02	2-ETHYLBUTYRIC ACID
075	.04	ETHYL CELLULOSE
430	.01	ETHYL CINNAMATE
432	1.23	ETHYL DECANOATE
149		2-ETHYL-3,5-DIMETHYL PYRAZINE
150	.05-	3-ETHYL-2,6-DIMETHYL PYRAZINE
543	.07-	ETHYLENE BRASSYLATE
433	.86	ETHYLENE OXIDE
079	.02	ETHYL FORMATE
436	.64	4-ETHYLGUAIACOL
437	.06-	ETHYL HEPTANOATE
439	.06-	ETHYL HEXANOATE
151	.31	2-ETHYL-1-HEXANOL
342	.17-	ETHYL 3-HEXENOATE
428	1.17	ETHYL 3-HYDROXYBUTYRATE
152	.08	3-ETHYL-2-HYDROXY-2-CYCLOPENTENONE
545		ETHYL 3-HYDROXYHEXANOATE
454	.05-	5-ETHYL-2-HYDROXY-3-METHYLCYCLOPENT-2-EN-1-ONE
453	.09-	3-ETHYL-2-HYDROXY-4-METHYLCYCLOPENT-2-EN-1-ONE
623		2-ETHYL-4-HYDROXY-5-METHYL-3(2H)-FURANONE
153	2.44	5-ETHYL-3-HYDROXY-4-METHYL-2(5H)-FURANONE
428	.47	ETHYL ISOBUTYRATE
463	.03	ETHYL ISOVALERATE
440	.01	ETHYL LACTATE
441	.67	ETHYL LAURATE
442	.03-	ETHYL LEVULINATE
487	.12	ETHYL MALTOL
279	1.27	ETHYL 2-MERCAPTOPROPIONATE
443	.41	ETHYL 2-METHYLBUTYRATE
488	.05-	ETHYL 2-METHYLPENTANOATE
456		ETHYL 2-METHYL-3-PENTENOATE
489		ETHYL 2-METHYL-4-PENTENOATE
444	.03	ETHYL METHYL PHENYLGLYCIDATE
154	.03-	2-ETHYL-5-METHYLPYRAZINE
155	.32	3-ETHYL-2-METHYLPYRAZINE
343	10.25	ETHYL 3-METHYLTHIOPROPIONATE
445	.08	ETHYL MYRISTATE
446	.10	ETHYL NITRITE
447	.05-	ETHYL NONANOATE
448	.10-	ETHYL 2-NONYNOATE
449	1.07	ETHYL OCTANOATE
664		ETHYL OENANTHATE
450	.11	ETHYL OLEATE
976	.01-	ETHYL OXYHYDRATE
451	.18-	ETHYL PALMITATE
420	.12-	ETHYL p _o -ANISATE
156	.06-	p _o -ETHYLPHENOL
452	.12-	ETHYL PHENYLACETATE
454	.40	ETHYL 3-PHENYLGLYCIDATE

SUBS NO	TF VALUE	SUBSTANCE
2456	.07	ETHYL PROPIONATE
3394	2.57	3-ETHYLPYRIDINE
2457		ETHYL PYRUVATE
2458	.10-	ETHYL SALICYLATE
3148	.12-	ETHYL T2-C4-DECADIENOATE
3345	.07-	2-ETHYLTHIOPHENOL
2460	.11-	ETHYL TIGLATE
3466	.06	ETHYL TRANS-2-BUTENOATE
3492	.14-	ETHYL UNDECANOATE
2451	3.98	ETHYL 10-UNDECENOATE
2462	.11-	ETHYL VALERATE
2464	.02	ETHYL VANILLIN
2465	.02	EUCALYPTOL
2466	.04-	EUCALYPTUS, OIL
2467	.01-	EUGENOL
2469	.10-	EUGENYL ACETATE
2475	.12-	EUGENYL METHYL ETHER
2478	.05-	FARNESOL
5080	.13	FATTY ACIDS
5409	.20	FD&C BLUE NO. 2
5403	.02-	FD&C BLUE NO. 1
5410	.49	FD&C BLUE NO. 1--ALUMINUM LAKE
5422	.59	FD&C BLUE NO. 2--ALUMINUM LAKE
5407	.06	FD&C GREEN NO. 3
5724		FD&C GREEN NO. 1--ALUMINUM LAKE
5404	.04-	FD&C RED NO. 3
5405	.21	FD&C RED NO. 40
5412	.40	FD&C RED NO. 3--ALUMINUM LAKE
5415	.02-	FD&C RED NO. 40--CALCIUM LAKE
5408	.04-	FD&C YELLOW NO. 6
5406	.01-	FD&C YELLOW NO. 5
5420	.26	FD&C YELLOW NO. 6--ALUMINUM LAKE
5416	.12	FD&C YELLOW NO. 5--ALUMINUM LAKE
5417	.16-	FD&C YELLOW NO. 5--CALCIUM LAKE
5479	.12-	d-FENCHONE
5480	.05-	FENCHYL ALCOHOL
5481	.15	FENNEL, COMMON (FOENICULUM VULGARE MILL)
5482	.05	FENNEL, SWEET
5453	.03-	FENNEL, SWEET, OIL
5485	.08	FENUGREEK, EXTRACT (TRIGONELLA FOENUM-GRAECUM L.)
5484	.71	FENUGREEK (TRIGONELLA FOENUM-GRAECUM L.)
5380		FERRIC AMMONIUM CITRATE
5080		FERRIC PHOSPHATE
5051	.06	FERRIC PYROPHOSPHATE
5014	1.71	FERRIC SULFATE
5276	.07	FERRUCYANIDE SALTS
5063	.26	FERROUS FUMARATE
5033	.08-	FERROUS GLUCONATE (2 H2O)
5035	-	FERROUS SULFATE (7 H2O)
5577		FISH OIL
5501		FLOUR, PASTRY
5502		FLOUR (PATENT)

UBS NO	TF VALUE	SUBSTANCE
410	.30	FOLIC ACID (FOLACIN)
086	.11-	FOOD STARCH-MODIFIED
487	.18	FORMIC ACID
395	.03-	2-FORMYL-6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-ENE
079		FRUCTOSE, FRUIT SUGAR
277		FULLERS EARTH
382	.11	FUMARIC ACID
452		FUNGAL AMYLASE
457		FUNGAL PECTINASE
458		FUNGAL PROTEASE
559		FUNG P&A/ASPERGIL ORYZAE
158	.12-	2-FURANMETHANETHIOL FORMA
499		FURCELLERAN
489	.01	FURFURAL
490		FURFURYL ACETATE
491	.03-	FURFURYL ALCOHOL
440	.12-	FURFURYL BUTYRATE
146	.23	2-FURFURYL DISULFIDE
492	.10-	2-FURFURYLIDENEBUTYRALOEH
161	.12-	FURFURYL ISOPROPYL SULFID
493	.05-	FURFURYL MERCAPTAN
160	.11-	FURFURYL METHYL SULFIDE
396	1.08	A6-FURFURYL OCTANOATE
346	.16-	FURFURYL PROPIONATE
284	.15-	N-FURFURYLPYRROLE
347	.22	FURFURYL THIOPROPIONATE
494	.09-	FURYL ACROLEIN
495	.03	4-/2-FURYL/-3-BUTENONE-2
497	.14	FUSEL, OIL, REFINED
498	.20-	GALANGAL ROOT (ALPINIA SPP.)
501	.09-	GALBANUM, OIL
502	.19	GALBANUM, RESIN
350	.10	GELATIN
504	3.41	GENET, ABSOLUTE
505	.03-	GENET, EXTRACT (SPARTIUM JUNCEUM L.)
506	.04	GENTIAN ROOT, EXTRACT (GENTIANA LUTEA L)
304	.02-	GENTIAN, STEMLESS
507	.01-	GERANIOL
198	.26	GERANIUM, EAST INDIAN, OIL (CYMBOPOGON MARTINI STAFF.)
196	.02	GERANIUM, OIL (PELARGONIUM SPP.)
508	.05-	GERANIUM, ROSE, OIL
509	.03-	GERANYL ACETATE
511	.12-	GERANYL BENZOATE
512	.03-	GERANYL BUTYRATE
514	.08-	GERANYL FORMATE
515	.13-	GERANYL HEXANOATE
513	.07-	GERANYL ISOBUTYRATE
518	.10-	GERANYL ISOVALERATE
516	.08-	GERANYL PHENYLACETATE
517	.04-	GERANYL PROPIONATE
519	.09	GHATTI, GUM (ANOGEISSUS LATIFOLIA WALL.)
521	.12-	GINGER, EXTRACT

SUBS NO	TF VALUE	SUBSTANCE
2522	.08	GINGER, OIL
2523	.01-	GINGER, OLEORESIN
2520	.07	GINGER (ZINGIBER OFFICINALE ROSC)
0278	.19	GLUCONO-DELTA LACTONE
3235	.07-	L-GLUTAMIC ACID
C355		L-GLUTAMINE
5329		GLUTARALDEHYDE
0089	-	GLYCERIN
5129		GLYCERIN, SYNTHETIC
5742		GLYCEROL ESTER OF PARTIALLY DIMERIZED ROSIN
4309	.06	GLYCEROL ESTER OF WOOD ROSIN/ESTER GUM
5131	1.34	GLYCERYL-LACTO ESTERS OF FATTY ACIDS
2526	.14-	GLYCERYL MONOOLEATE
2527	.25	GLYCERYL MONOSTEARATE
3398	1.43	GLYCERYL TRIBENZOATE
3286	.15	GLYCERYL TRIPROPANOATE
3287	.16	GLYCINE
4576		GLYCINE HYDROCHLORIDE
2529	.08-	GRAINS OF PARADISE
4538		GRAPE ESSENCE, NATURAL
4539		GRAPEFRUIT ESSENCE, NAT
2530		GRAPEFRUIT, OIL
4631	.14-	GRAPEFRUIT OIL CONC
5612	.04	GRAPE SKIN EXTRACT (ENOCIANINA)
4567		GREEN PEPPER, GRANULES
4570		GROUND CHILIES
2532	.20	GUAIACOL
2534	.02	GUAIAC WOOD, OIL
4311	.08	GUAIACYL ACETATE
2535	.13-	GUAIACYL PHENYLACETATE
4312	.27	GUAIENE
2536	.15-	GUARANA, GUM
0092		GUAR GUM
6199	.08-	GUAVA (PSIDIUM SPP.)
0282	.18	GUMS, VEGETABLE
2538	.05	HAW BARK, BLACK, EXT
2911	.11	HELICTROPINE
3164	.12-	2,4-HEPTADIENAL
2539	.05-	8-HEPTALACTONE
2540	.06-	HEPTANAL
2542	4.97	HEPTANAL GLYCERYL ACETAL
2543	.10	2,3-HEPTANEDIONE
3348	.44	HEPTANOIC ACID
2542	1.42	2-HEPTANOL
2547	.08-	3-HEPTANOL
2545	.04-	3-HEPTANONE
2546	.63	4-HEPTANONE
2544	.07	2-HEPTANONE
2545	.05-	2-HEPTENAL
289	.05-	4-HEPTENAL
400	.13-	3-HEPTEN-2-ONE
399	.13-	2-HEPTEN-4-ONE

UBS NO	TF VALUE	SUBSTANCE
547	.07-	HEPTYL ACETATE
548	.08-	HEPTYL ALCOHOL
551	.15-	HEPTYL CINNAMATE
552	.08-	HEPTYL FORMATE
350	.56	3-HEPTYL-5-METHYL-2(3H)-FURANONE
283	.01-	HESPERIDIN
554		1-HEXADECANOL
555	.14	6&8-6-HEXADECENLACTONE
429	.02-	TRANS, TRANS-2,4-HEXADIENAL
167	.06	6&3-HEXALACTONE
556	.20	6&8-HEXALACTONE
557	.55	HEXANAL
330	.05-	HEXANE
558	.06-	2,3-HEXANEDIONE
168	.01-	3,4-HEXANEDIONE
559	.10	HEXANOIC ACID
351	.15-	3-HEXANOL
560	.15	2-HEXENAL
561	1.13	CIS-3-HEXENAL
496	.11	CIS-4-HEXENAL
074	.55	TRANS-3-HEXENAL
169	.96	T2-HEXENOIC ACID
170	.06-	T3-HEXENOIC ACID
562	.46	2-HEXENOL-1
563	.15	3-HEXENOL-1
564	.76	2-HEXEN-1-YL ACETATE
171	-	C3-HEXEN-1-YL ACETATE
452	.03	CIS-3-HEXENYL BUTYRATE
515	.30	TRANS-2-HEXENYL BUTYRATE
353	.43	3-HEXENYL FORMATE
497	.87	3-HEXENYL 2-METHYLBUTANOATE
498	.16	3-HEXENYL 3-METHYLBUTANOATE
633	.11-	3-HEXENYL PHENYLACETATE
076	.14-	CIS-3-HEXENYL VALERATE
565	.12	HEXYL ACETATE
567	.06	HEXYL ALCOHOL
354	.23	N-HEXYL 2-BUTENOATE
568	.04-	HEXYL BUTYRATE
569	.64	6&8-HEXYLCINNAMALDEHYDE
570	.12	HEXYL FORMATE
571	.11-	HEXYL 2-FUROATE
572	.34	HEXYL HEXANOATE
172	.12-	HEXYL ISOBUTYRATE
500	1.23	HEXYL 3-METHYLBUTANOATE
499	.27	HEXYL 2-METHYLBUTANOATE
575	.06-	HEXYL OCTANOATE
457	.13	HEXYL PHENYLACETATE
576	.10-	HEXYL PROPIONATE
318	.06-	HEXYL, 150-VALERATE
320	.01-	HICKORY, SMOKE, DIST
296		L-HISTIDINE
566		HO LEAF OIL

UBS NO	TF VALUE	SUBSTANCE
136		MOP EXTRACT, MODIFIED
575		MOPS, EXTRACT
579	.13-	MOPS, EXTRACT SOLID
580	.13-	MOPS, OIL
581	.21	MOREHOUND (MOARMOUND), EXTRACT (MARRUBIUM VULGARE L.)
686		MOREHOUND, SOLID, EXT.
201	.05-	MORSERADISH (ARMORACIA LAPATHIFOLIA GILIB.)
277		MORSERADISH, OIL (ARMORACIA LAPATHIFOLIA GILIB.)
297	.18	HYDROCHLORIC ACID
298	.03	HYDROGEN PEROXIDE
446	.10-	HYDROGEN SULPHIDE
291	.01	4-HYDROXYBUTANOIC ACID LACTONE
583	.11	HYDROXYCITRONELLAL
585	.03-	HYDROXYCITRONELLAL DIMETH
586	.03-	HYDROXYCITRONELLOL
174	3.59	4-HYDROXY-2,5-DIMETHYL-3(2H)-FURANONE
139	.02	HYDROXYLATED LECITHIN
787	.10-	N-14-HYDROXY-3-METHOXYBEN
292	5.87	3-(HYDROXYMETHYL)-2-OCTANONE
356	1.24	HYDROXYNONANOIC ACID, G&-LACTONE
293	.02-	4-HYDROXY-3-PENTENOIC ACID LACTONE
588	.06	4-(P-HYDROXYPHENYL)-2-BUTANONE
141		HYDROXYPROPYL CELLULOSE
534	.22	HYDROXYPROPYL METHYLCELLULOSE
294	2.92	5-HYDROXYUNDECANOIC ACID LACTONE
591	.12-	HYSSOP, OIL
592	.05	IMMORTELLE, EXTRACT
593	.03	INDOLE
099	.06-	INOSITOL
409		INVERTASE
429	.03-	INVERT SUGAR
430		INVERT SUGAR SYRUP
334	.03-	ION-EXCHANGE RESINS
625		B&-IONOL
594	.02-	A&-IONONE
595	.02	B&-IONONE
175	.01-	IONONE -E&
143	.11-	IRON AMMONIUM CITRATE (FERRIC AMMONIUM CITRATE, GREEN)
597	9.41	A&-IRONE
030	.12	IRON, ELECTROLYTIC
100	.08	IRON, REDUCED
055	.03-	ISOAMYL ACETATE
551	-	ISOAMYL ACETOACETATE
057		ISOAMYL ALCOHOL
058	.05-	ISOAMYL BENZOATE
060	.03-	ISOAMYL BUTYRATE
063	.03-	ISOAMYL CINNAMATE
069	.03-	ISOAMYL FORMATE
070	.10-	ISOAMYL 2-FURANBUTYRATE
071	.10-	ISOAMYL 2-FURANPROPIONATE
075	.05-	ISOAMYL HEXANOATE
085	.10-	ISOAMYL ISOVALERATE

SUBS NO	TF VALUE	SUBSTANCE
030	5.44	ISOAMYL OCTANOATE
031	-	ISOAMYL PHENYLACETATE
082	.10	ISOAMYL PROPIONATE
158	.08-	ISOBORNEOL
160	3.63	ISOBORNYL ACETATE
162	.11-	ISOBORNYL FORMATE
166	.01	ISOBORNYL ISOVALERATE
163	.14-	ISOBORNYL PROPIONATE
175	.10	ISOBUTYL ACETATE
180	.14-	ISOBUTYL ANGELATE
132	.11-	ISOBUTYL ANTHRANILATE
185	.08-	ISOBUTYL BENZOATE
432		ISOBUTYL 2-BUTENOATE
187	.11-	ISOBUTYL BUTYRATE
193	.26	ISOBUTYL CINNAMATE
197	.10-	ISOBUTYL FORMATE
198	.10-	ISOBUTYL 2-FURANPROPIONAT
202	.02-	ISOBUTYL HEXANOATE
189	.14-	ISOBUTYL ISOBUTYRATE
132	.05	2-ISOBUTYL-3-METHOXYPIRAZ
133	.05	2-ISOBUTYL-3-METHYLPYRAZI
208	.37	A8-ISOBUTYLPHENETHYL ALCO
210	.05	ISOBUTYL PHENYLACETATE
212	.12-	ISOBUTYL PROPIONATE
213	.08	ISOBUTYL SALICYLATE
134	.03	2-ISOBUTYLTHIAZOLE
220	1.15	ISOBUTYRALDEHYDE
222	.15	ISOBUTYRIC ACID
079	.22	ISOCYCLOCITRAL
468	.10-	ISOEUGENOL
470	.06-	ISOEUGENYL ACETATE
301	.10-	ISCEUGENYL BENZYLETHER
476	.07	ISOEUGENYL METHYL ETHER
552	.13-	ISOJASMONE
102		L-ISOLEUCINE
460	.08	D,L-ISOMENTHONE
714	.13-	A8-ISOMETHYLIONONE
219	.11-	ISOPENTYLAMINE
553	.14-	ISOPHORONE
166	.07-	H6-6-ISOPROPENYL-4,4A-ME2-NA
226	.12-	ISOPROPYL ACETATE
229	.26	ISOPROPYL ALCOHOL
133	.10-	P2-ISOPROPYLBENZYL ALCOHO
139	.12-	ISOPROPYL CINNAMATE
161	.03-	ISOPROPYL ISOVALERATE
065		2-ISOPROPYL-5-METHYL-2-HEXENAL
55		2-ISOPROPYL-4-METHYLTHIAZOLE
51	.07-	2-ISOPROPYLPHENOL
157	.13-	3 P-ISUPROPYL-PHENYLPROPI
29	.10-	ISOPROPYL TIGLATE
152	.06-	ISOPULEGOL
164	.10-	ISOPULEGONE

SUBS NO	TF VALUE	SUBSTANCE
2965	.02-	ISOPULEGYL ACETATE
3102	.03	ISOVALERIC ACID
2598	.06-	JASMINE, ABSOLUTE
2599	.12-	JASMINE, CONCENTRATE
2600	.11-	JASMINE, OIL
3196	.02	JASMONE
2602	-	JUNIPER BERRIES (JUNIPERUS COMMUNIS L.)
2603	.01-	JUNIPER, EXTRACT
2604	.05-	JUNIPER, OIL
2606	.03	KELP
2607	.03-	KOLA NUT, EXTRACT (COLA ACUMINATA SCHOTT ET ENDL.)
2608	.65	LABDANUM, ABSOLUTE
2609	.04-	LABDANUM, OIL
2610	.13-	LABDANUM, OLEORESIN
0470	.08-	LACTALBUMIN
0103	.35	LACTIC ACID
0406	y.20	LACTOSE
5149	.32	LACTYLIC ESTERS OF FATTY ACIDS
0506		LARD, HYDROGENATED
2613	.01-	LAUREL LEAVES, EXTRACT
5150	.60	LAURIC ACID
2615	.06-	LAURIC ALDEHYDE
2616	.13-	LAURYL ACETATE
2617	.01	LAURYL ALCOHOL
2618	.86	LAVANDIN, OIL
2622	.08-	LAVENDER, OIL
0104	.29	LECITHIN
0286		LECITHIN, MOD W/BENZ PER
0287	.02	LECITHIN, MOD W/HYD PER
4326	.05-	LEEK, OIL
2623	.14-	LEMON, EXTRACT
2624	.07-	LEMON-GRASS, OIL
2625	.03	LEMON, OIL
2626	.02-	LEMON OIL, TERP/LESS
4573	.59	LEMON PEEL GRANULES
0105	.32	DL-LEUCINE
3297	.13-	L-LEUCINE
2627	.02-	LEVULINIC ACID
0497	.48	LEVULOSE
2628	.08	LICORICE, EXTRACT (GLYCYRRHIZA SPP.)
2629	2.80	LICORICE, EXTRACT POWDER (GLYCYRRHIZA GLABRA L.)
2631	.02	LIME, OIL
3689		LIME, OIL, DIST.
3690		LIME, OIL, EXPRESSED
2632	.03-	LIME OIL, TERPENELESS
3608		LIME TERPENES
3669		1-LIMONENE
2633	.02	α -LIMONENE
2634	.03-	LINALOE WOOD, OIL
2635	.07	LINALOOL
4323	.42	LINALOOL OXIDE
2636	-	LINALYL ACETATE

UBS NO	TF VALUE	SUBSTANCE
637	.04-	LINALYL ANTHRANILATE
638	.10-	LINALYL BENZOATE
639	-	LINALYL BUTYRATE
641	.13-	LINALYL CINNAMATE
642	.03-	LINALYL FORMATE
643	-	LINALYL HEXANOATE
640	.13-	LINALYL ISOBUTYRATE
646	.10-	LINALYL ISOVALERATE
645	.18	LINALYL PROPIONATE
386		LIPASE
719		LIPOLIZED BUTTER OIL
718	.49	LIPOLIZED CREAM
203		LOCUST BEAN (CERATONIA SILIQUA L.)
648	.11	LOCUST (CAROB) BEAN GUM
649	.05	LOVAGE
650	.08	LOVAGE, EXTRACT
651	.09-	LOVAGE, OIL
332	.03-	LUPULIN
109	.56	L-LYSINE
652		MACE (MYRISTICA FRAGRANS HOUTT)
653		MACE, OIL
654	.08	MACE, OLEORESIN
110	6.12	MAGNESIUM CARBONATE
387	.33	MAGNESIUM CHLORIDE (6 H2O)
111	.11-	MAGNESIUM HYDROXIDE
112	2.28	MAGNESIUM OXIDE
113	.29	MAGNESIUM PHOSPHATE, DIBASIC (3 H2O)
115	.20-	MAGNESIUM SILICATE
116	.11	MAGNESIUM STEARATE
117	.12-	MAGNESIUM SULFATE (7 H2O)
118	-	DL-MALIC ACID
655	2.76	L-MALIC ACID
551		MALTED MILK
205		MALT, EXTRACT (HORDEUM VULGARE L. OR OTHER GRAINS)
459	.07-	MALT FLOUR
412		MALTO DEXTRIN
656	.06-	MALTOL
291	.01-	MALT SYRUP
462		MALTYL ISOBUTYRATE
657	.05-	MANDARIN, OIL (CITRUS RETICULATA BLANCO)
124	.78	MANGANESE SULFATE
126	.09-	MANNITOL
525	.09	MAPLE CONCENTRATE
515		MARGARINE
659	1.01	MARJORAM, OLEORESIN
662	-	MARJORAM, SWEET
663	.02	MARJORAM, SWEET, OIL
204	.48	MATE, ABSOLUTE (ILEX PARAGUARIENSIS ST. HIL.)
336	.09	MATE LEAVES
557	.13	P-MENTHA-1,6-DIEN-7-AL
559	.44	P-MENTHA-1,4-DIENE
558	.04	P-MENTHA-1,3-DIENE

SUBS NO	TF VALUE	SUBSTANCE
664	.34	P α -MENTHA-1,8-DIENOL-7
561	.10	P-MENTHA-1,8-DIEN-7-YL ACETATE
177	.01	P α -MENTHA-8-THIOL-3-ONE
565	.11-	1-P-MENTHEN- γ -YL ACETATE
235	.10-	MENTHOFURAN
605	.04-	MENTHOL
607	.10-	MENTHONE
668	.11-	MENTHYL ACETATE
609	.02-	MENTHYL ISOVALERATE
502	.09	2-MERCAPTO-3-BUTANOL
503	7.29	2,3/10-MERCAPTOPYRAN
180	.18	2-MERCAPTOPROPIONIC ACID
103	.11	METHACRYLIC ACID-DIVINYLBENZENE COPOLYMER
360	.60	L-METHIONINE
301	4.56	DL-METHIONINE
670	.12-	P α -METHOXYBENZALDEHYDE
181	.11-	O α -METHOXYCINNAMALDEHYDE
671	.02-	2-METHOXY-4-METHYLPHENOL
673	.48	1-P-METHOXYPHEN-1-PENTENO
674	.09-	1-P-METHOXYPHEN-PROPANONE
672	.19	4-(P-METHOXYPHENYL)-2-BUTANONE
598		2-METHOXY-4-PROPYLPHENOL
302	.16-	METHOXYPYRAZINE
675	.09-	2-METHOXY-4-VINYLPHENOL
183	.08-	2-METHOXY-X-METHYLPYRAZINE
676	.45	METHYL ACETATE
677	.12-	P α -METHYL ACETOPHENONE
711	.03-	METHYL-A β -IONONE
342	.16	METHYL ALCOHOL
679	.11-	METHYL ANISATE
681		P β -METHYLANISOLE
680	.13-	O α -METHYLANISOLE
682	4.78	METHYL ANTHRANILATE
683	1.03	METHYL BENZOATE
664		A β -METHYLBENZYL ACETATE
104	.26-	METHYLBENZYL ACETATE (MIXED O-, M-, P-)
685	1.29	A β -METHYLBENZYL ALCOHOL
686	.13-	A β -METHYLBENZYL BUTYRATE
504		METHYL BENZYL DISULFIDE
688	.11-	A β -METHYLBENZYL FORMATE
687	1.40	A β -METHYLBENZYL ISOBUTYRA
689	.09-	A β -METHYLBENZYL PROPIONAT
712	.11-	METHYL-B β -IONONE
723	.05	METHYL B β -NAPHTHYL KETONE
722		METHYL BROMIDE
304	3.35	3--METHYL-2-BUTANETHIOL
407	.01	2-METHYL-2-BUTENAL
644		2-METHYLBUTYL ACETATE
506	.47	2-METHYLBUTYL 3-METHYLBUTANOATE
507	.09-	3-METHYLBUTYL 2-METHYLPROPANOATE
691	.04	2-METHYLBUTYRALCEHYDE
692	.15	3-METHYLBUTYRALDEHYDE

UBS NO	TF VALUE	SUBSTANCE
093	.03-	METHYL BUTYRATE
645	.25	2-METHYLBUTYRIC ACID
127	.07-	METHYLCELLULOSE
097	.07	A8-METHYLCINNAMALDEHYDE
640	.07-	P-METHYLCINNAMALDEHYDE
698	.48	METHYL CINNAMATE
099	.18	6-METHYLCOUMARIN
187	.07-	3-METHYLCROTONIC ACID
305	.03-	1-METHYL-2,3-CYCLOHEXADIONE
568		METHYL CYCLOHEXANECARBOXYLATE
243	1.42	METHYL-3-CYCLOHEX-1-ENL BU-2EN
700	.13	METHYLCYCLOPENTENOLONE
351		METHYL DIHYDROABIETATE
306	.13	5H-5-METHYL-6,7-DIHYDROCYCLOPENTA(B)PYRAZINE
408	.16	METHYL DIHYDROJASMONATE
345	.04-	METHYLENE CHLORIDE
747		METHYL ESTER OF ROSIN, PARTIALLY HYDROGENATED
168	.14-	2-METHYL-3-FURANTHIOL
362	.03-	METHYL FURFURYL DISULFIDE
703	.19	METHYL 2-FUROATE
704	1.12	2-METHYL-3-FURYLACROLEIN
363	2.63	6-METHYL-3,5-HEPTADIEN-2-ONE
705	.03-	METHYL HEPTANOATE
706	.16	2-METHYLHEPTANOIC ACID
707	.07-	6-METHYL-5-HEPTENONE-2
190	.07	5-METHYL-2,3-HEXANEDIONE
708	.02	METHYL HEXANOATE
191	.08	2-METHYLHEXANOIC ACID
709	.09-	METHYL 2-HEXENOATE
713	.57	METHYL IONONE GAMMA
632		METHYL IONONES
753	2.20	METHYL ISOVALERATE
715	.13-	METHYL LAURATE
411	.06	METHYL LINOLEATE (48%) METHYL LINOLENATE (52%) MIXTURE
716	.07-	METHYL MERCAPTAN
719	.18	METHYL 2-METHYLBUTYRATE
573		METHYL 2-METHYL-3-FURYL DISULFIDE
720	.40	METHYL 3-METHYLTHIOPROPIONATE
721	.10-	METHYL 4-METHYLVALERATE
722	.35	METHYL MYRISTATE
193	.12-	1-METHYLNAPHTHALENE
718	.18	METHYL N-METHYLANTHRANILATE
725	.08	METHYL 2-NONENOATE
726	.26	METHYL 2-NONYNOATE
727	.10-	2-METHYLOCTANAL
728	.12-	METHYL OCTANOATE
575		4-METHYLOCTANOIC ACID
729	.01	METHYL 2-OCTYNOATE
717	1.18	METHYL O6-METHOXYBENZOATE
128	.06-	METHYLPARABEN
730	.06-	4-METHYL-2,3-PENTANEDIONE
437	.16-	3-METHYLPENTANOIC ACID

UBS NO	TF VALUE	SUBSTANCE
463	.02-	4-METHYLPENTANOIC ACID
731	.04-	4-METHYL-2-PENTANONE
194	.09-	2-METHYL-2-PENTENAL
358	.15-	4-METHYL-3-PENTEN-2-ONE
197		A-METHYLPHENETHYLBUTYRATE
199	.01	5-METHYL-2-PHEN-2-HEXENAL
200	.06-	4-METHYL-2-PHEN-2-PENTENA
733	.11-	METHYL PHENYLACETATE
734	.11-	3-METHYL-4-PHENYL-3-BUTEN
736	.06-	2-METHYL-4-PHENYL-2-BUTYL
737	.03-	2-METHYL-4-PHENYLBUTYRALD
740	.06-	4-METHYL-1-PHENYLPENTANON
292	.07-	METHYLPOLYSILICONE
576	.06	METHYL 1-PROPENYL DISULFIDE
742	.03-	METHYL PROPIONATE
201	.64	METHYL PROPYL DISULFIDE
369	.12	2-METHYLPROPYL 3-METHYLBUTYRATE
578		2-METHYL-4-PROPYL-1,3-OXATHIANE
306	.15-	METHYL PROPYL TRISULFIDE
690	.01-	METHYL p-TERT-BUTYLPHENYLACETATE
309	.01-	2-METHYLPYRAZINE
744	.05-	6-METHYLQUINOLINE
203	.06	5-METHYLQUINOXALINE
745	.01-	METHYL SALICYLATE
373	.12-	2-METHYLTETRAHYDROFURAN-3-ONE
512	.01-	2-METHYLTETRAHYDROTHIOPHEN-3-ONE
204	.25	4-METHYL-5-THIAZOLEETHANO
205	.13-	4-METHYL-5-THIAZOLE-ET*OL- AC
374	.16-	3-(METHYLTHIO)BUTANAL
310	.04-	METHYL THIOBUTYRATE
311	.11-	METHYL THIOFUROATE
438		3-(METHYLTHIO)-1-HEXANOL
601		2-(METHYLTHIO)METHYL-2-BUTENAL
376	.02-	4-(METHYLTHIO)-4-METHYL-2-PENTANONE
208	.01-	/METHYLTHIO/METHYLPYRAZIN
209	3.75	5-METHYL-2-THIOPHENECARBOXALDEHYDE
415	2.70	3-(METHYLTHIO)PROPANOL
747	.07	2-METHYLTHIOPROPIONALDEHY
312	.04	3-METHYLTHIOPROPYL ISOTHIOCYANATE
748	.07-	2-METHYL-3-TOLYL PROPIONA
749	.07-	2-METHYLUDECANAL
750	.13-	METHYL 9-UNDECENOATE
752	.11-	METHYL VALERATE
754	.04-	2-METHYLVALERIC ACID
211	.03	2-METHYL-5-VINYLPYRAZINE
313	.08-	4-METHYL-5-VINYLTIAZOLE
443		MICROBIAL CULTURES
169	4.29	MILK CLOTTING ENZYME, DERIVED FROM ENDOTHIA PARASITICA
171	.05	MILK CLOTTING ENZYME, DERIVED FROM MUCOR PUSILLUS LINDT
273	.13-	MILK POWDER, WHOLE, ENZYME MOD.
498		MILK, SKIM
545		MILK, SKIM, CONDENSED

UBS NO	TF VALUE	SUBSTANCE
514		MILK, SKIM, POWDERED
755	.01-	MIMOSA, ABSOLUTE
529	.02	MINERAL OIL, WHITE
538		MOLASSES
206	5.03	MOLASSES, EXTRACT (SACCHARUM OFFICINARUM L.)
129	.04	MONO AMMONIUM GLUTAMATE
130	.02	MONO- AND DIGLYCERIDES
131	.01-	MONOGLYCERIDE CITRATE
133	.12-	MONOPOTASSIUM GLUTAMATE
134	.07	MONOSODIUM GLUTAMATE
135	.11-	MONOSODIUM PHOSPHATE DERIV. MONO-DIGLY.
757	4.19	MOUNTAIN MAPLE, EXTRACT SOLID (ACER SPICATUM LAM.)
758	2.43	MUSK AMBRETTE
759	.10-	MUSK TONQUIN
760	.03	MUSTARD, BROWN (BRASSICA SPP.)
577		MUSTARD FLOUR
546		MUSTARD, ORIENTAL
514	.10-	MUSTARD SEED WHOLE
761	.06	MUSTARD, YELLOW (BRASSICA SPP.)
207		MUSTARD, YELLOW, EXTRACT (BRASSICA SPP.)
762	-	MYRCENE
763	.11-	MYRISTALDEHYDE
177	.28	MYRISTIC ACID
765	.20-	MYRRH, GUM
766	.03	MYRRH, OIL
767	.11-	B&NAPHTHYL ANTHRANILATE
768	.12-	B&NAPHTHYL ETHYL ETHER
485	.02	NARINGIN
770	.05	NEROL
771	.05-	NEROLI BIGARDE, OIL
772	.10-	NEROLIDOL
773	.01	NERYL ACETATE
775	.11-	NERYL ISOBUTYRATE
136	.16	NIACIN
137	6.11	NIACINAMIDE
582	.04-	NICKEL
132	.29	NITROGEN
760	.36	2,6-NONADIENOL-1
781	.05-	E&-NONALACTONE
782	.04-	NONANAL
783	.32	1,3-NONANEDIOL ACETATE
784	.31	NONANOIC ACID
440	.75	3-NONANONE
785	.66	2-NONANONE
377	.13-	NONA-2-TRANS, 6-CIS-DIENAL
213	.05-	2-NONENAL
580	.14-	CIS-6-NONENAL
465	.05-	CIS-6-NONEN-1-OL
788	.01-	NONYL ACETATE
789	.11-	NONYL ALCOHOL
903	.03-	NOPINENE
792	.11	NUTMEG (MYRISTICA FRAGRANS HOUTT.)

SUBS NO	TF VALUE	SUBSTANCE
793		NUTMEG, OIL (MYRISTICA FRAGRANS HOUTT.)
529		NUTMEG, OLEORESIN
794	.16-	OAK CHIPS, EXTRACT
795	.01-	OAK MOSS, ABSOLUTE
510		OATMEAL (ROLLED OATS)
380	.65	9,12-OCTADECADIENOIC ACID (48X) AND
466	.07-	2-TRANS-6-TRANS-OCTADIENAL
214	.11-	6-OCTALACTONE
796	.10	E2-OCTALACTONE
797	.17	OCTANAL
581	.06-	3-OCTANOL
800	.01-	1-OCTANOL
601	.06-	2-OCTANOL
803	.07-	3-OCTANONE
602	.25	2-OCTANONE
804	.18	3-OCTANON-1-OL
215	.11-	2-OCTENAL
805	.02	1-OCTENOL-3
603		2-OCTEN-4-ONE
582	.09-	1-OCTEN-3-YL ACETATE
583	.10-	3-OCTYL ACETATE
806	.13	OCTYL ACETATE
807	.12-	OCTYL BUTYRATE
809	.07-	OCTYL FORMATE
518		OCTYL 2-FURDATE
808	.22	OCTYL ISOBUTYRATE
649	.25	OEANTHIC ETHER
816	.05	OLIBANUM, OIL
509	.63	ONION, ALLIUM CEPA
580		ONION GRANULES
581		ONION, MINCED, DEHYD
817	.20	ONION, OIL (ALLIUM CEPA L.)
120	.07-	OPOPANAX
122	.06-	OPOPANAX, OIL
619		ORANGE AROMA WATER
402	.10-	ORANGE B
818	.14-	ORANGE BLOSSOMS, ABSOLUTE (CITRUS AURANTIUM L.)
540	.01	ORANGE ESSENCE, NATURAL
542		ORANGE ESSENCE, OIL NAT
819	.15-	ORANGE FLOWERS (CITRUS AURANTIUM L.)
820	.14-	ORANGE LEAF, ABSOLUTE (CITRUS AURANTIUM L.)
821	.17	ORANGE, OIL, DISTILLED (CITRUS SINENSIS (L.) OSBECK)
522	.10	ORANGE, OIL, TERPENELESS (CITRUS SINENSIS (L.) OSBECK)
526	.04-	ORANGE PEEL
823	.02	ORANGE PEEL, BITTER, OIL (CITRUS AURANTIUM L.)
524	.05	ORANGE PEEL, SWEET, EXTRACT (CITRUS SINENSIS (L.) OSBECK)
825	.15	ORANGE PEEL, SWEET, OIL (CITRUS SINENSIS (L.) OSBECK)
526	.49	ORANGE PEEL, SWEET, OIL, TERPENELESS (CITRUS SINENSIS (L.)
671	.17-	ORANGE TERPENES
827	.18	OREGANO
828	.03-	ORIGANUM, OIL
829	.12-	ORRIS, CONCENTRATE, LIQUID/OIL

SUBS NO	TF VALUE	SUBSTANCE
1830	.05-	ORRIS ROOT EXTRACT
1831		3-OXOBUTANAL, DIMETHYL ACETAL
1844	.03-	OXYTEARIN
1844	.11-	PARA-DIMETHYLSTYRENE
1831	.06-	PALMAROSA, OIL
1845	3.19	PALMITIC ACID
1849		PALM KERNEL OIL
1842	.06-	PAPAIN
1803	.03	PAPRIKA
1804	.04	PAPRIKA OLEORESIN
1820	.32	PARAFFIN
1809		PARMESAN CHEESE
1835	.02	PARSLEY
1836	-	PARSLEY, OIL
1812	.05-	PARSLEY OLEORESIN
1838	.40	PATCHOULY, OIL
1891		PEANUT OIL
1835	.01-	PECTIN
1892		PECTINASE
1832	.02-	PECTIN, MODIFIED
1823	.03	PECTINOL
1839	.07	PENNYROYAL, OIL
1840	.31	W β -PENTADECALACTONE
1817	.11-	2,4-PENTADIENAL
1841	.14	2,3-PENTANEDIONE
1816		2-PENTANOL
1842	.46	2-PENTANONE
1818	4.28	2-PENTENAL
1843	.09	4-PENTENOIC ACID
1844	.08-	1-PENTEN-3-OL
1842	.08	1-PENTEN-3-ONE
1817	.88	3-PENTEN-2-ONE
1845	.02	PEPPER, BLACK, OIL (PIPER NIGRUM L)
1846	.08	PEPPER, BLACK, OLEORES
1844		PEPPER, BLACK (PIPER NIGRUM L)
1847	4.17	PEPPERMINT LEAVES
1848	.06	PEPPERMINT, OIL (MENTHA PIPERITA L)
1880		PEPPERMINT TERPENES
1849	.03	PEPPER, RED (CAPISCUM FRUTESCENS L (CAPISCUM ANNUM L))
1850	.39	PEPPER, WHITE
1851	.01-	PEPPER, WHITE, OIL
1852	.09-	PEPPER, WHITE, OLEORES
1896	.06-	PEPSIN
1853	.09-	PETITGRAIN, LEMON, OIL
1854	.04-	PETITGRAIN, MANDARIN, OIL (CITRUS RETICULATA BLANCO VAR.
1855	.05	PETITGRAIN, OIL (CITRUS AURANTIUM L.)
1807		PETITGRAIN OIL TERPENELESS
1828	.35	PETROLATUM
1891		PETROLEUM HYDROCARBONS, ODORLESS, LIGHT
1856	.07	PH β -PHELLANDRENE
1857	.05-	PHENETHYL ACETATE
1852	1.49	PHENETHYL ALCOHOL

SUBS NO	TF VALUE	SUBSTANCE
3220	.10-	PHENETHYLAMINE
2859	3.61	PHENETHYL ANTHRANILATE
2860	.10-	PHENETHYL BENZOATE
2561	.29	PHENETHYL BUTYRATE
2863	.04-	PHENETHYL CINNAMATE
2864	.12-	PHENETHYL FORMATE
3221	.07-	PHENETHYL HEXANOATE
2862	.24	PHENETHYL ISOBUTYRATE
2671	.01	PHENETHYL ISOVALERATE
3632	.11-	PHENETHYL 2-METHYLBUTYRATE
3222	.07-	PHENETHYL OCTANOATE
2866	.24	PHENETHYL PHENYLACETATE
2867	.04-	PHENETHYL PROPIONATE
2868		PHENETHYL SALICYLATE
2869	.70	PHENETHYL SENECEOATE
2870	.13-	PHENETHYL TIGLATE
3223	.02-	PHENOL
2873	.12-	2-PHENOXYETHYL ISOBUTYRAT
2874	.27	PHENYLACETALDEHYDE
3354		PHENYLACETALDEHYDE DIISOBUTYL ACETAL
2876	.12-	PHENYLACETALDEHYDE DIMETH
2877	.11-	PHENYLACETALD GLYCERYL ACETATE
2878	.04	PHENYLACETIC ACID
0144		L-PHENYLALANINE
0143	.03-	DL-PHENYLALANINE
3224	.09	2-PHENYL-2-BUTENAL
2880	.19	4-PHENYL-3-BUTENOL-2
2861	.03	4-PHENYL-3-BUTENONE-2
3468		2-PHENYL-3-CARBETHOXY FURAN
3586		2-PHENYL-3-(2-FURYL)PROP-2-ENAL
2883	.06-	1-PHENYL-3-METHYLPENTANOL
3226	.12-	1-PHENYL-1,2-PROPANEDIONE
2884	.14-	1-PHENYLPROPANOL-1
2888	.05-	2-PHENYLPROPIONALD DIMET
2866	.13-	2-PHENYLPROPIONALDEHYDE
2867	.07-	3-PHENYLPROPIONALDEHYDE
2889	.05	3-PHENYLPROPIONIC ACID
2890	.39	3-PHENYLPROPYL ACETATE
2594	.13-	3-PHENYLPROPYL CINNAMATE
2895	.01	3-PHENYLPROPYL FORMATE
2893	.12-	3-PHENYLPROPYL ISOBUTYRAT
2892	.27	2-PHENYLPROPYL ISOBUTYRAT
2899	.11-	3-PHENYLPROPYL ISOVALERAT
2897	.10-	3-PHENYLPROPYL PROPIONATE
2898	.10	2-/3-PHENYLPROPYL/-TETRAH
0145	.14	PHOSPHORIC ACID
2901	.02-	PIMENTA LEAF, OIL (PIMENTA OFFICINALIS LINDL)
3693		PINEAPPLE, FLAVOR, IMIT.
2902	.03-	A&-PINENE
2904	-	PINE NEEDLE, DWARF, OIL
2905	.08-	PINE NEEDLE, OIL
2906	.10-	PINE, SCOTCH, OIL

SUBS NO	TF VALUE	SUBSTANCE
0133	.03-	PINE, WHITE, OIL (PINUS SPP.)
0908	1.04	PIPERIDINE
0910	.12-	/D-PIPERITONE
0912	.04-	PIPERONYL ACETATE
0701	.06-	PIPERONYL-ACETONE
0913	.11-	PIPERONYL ISOBUTYRATE
0914	.10-	PIPSISSEWA LEAVES, EXT
0198		POLYETHYLENE GLYCOL (M.W. 200-9,500)
0199	.08	POLYGLYCEROL ESTERS OF FATTY ACIDS
0200		POLYOXYETHYLENE 40 MONOSTEARATE
0535	.01-	POLYSORBATE 65
0917	.57	POLYSORBATE 80
0915	1.47	POLYSORBATE 20
0393	.32	POLYSORBATE 60
0207	-	POLYVINYLPIRROLIDONE
0919	.05	POPPY SEED
0146	.03	POTASSIUM ACID TARTRATE
0148	.14	POTASSIUM BICARBONATE
0299	3.06	POTASSIUM BROMATE
0150	.04-	POTASSIUM CARBONATE
0151	.09	POTASSIUM CHLORIDE
0152	.11	POTASSIUM CITRATE (1 H2O)
0154	.01	POTASSIUM HYDROXIDE
0346	.05	POTASSIUM IODATE
0155	-	POTASSIUM IODIDE
0156	.08	POTASSIUM METABISULFITE
0157	.42	POTASSIUM PHOSPHATE, DIBASIC
0304	.01	POTASSIUM PHOSPHATE, MONO
0305	.03	POTASSIUM PHOSPHATE, TRI
0307		POTASSIUM PYROPHOSPHATE
0158	.08	POTASSIUM SORBATE
0159	.16-	POTASSIUM SULFATE
0308	.11	POTASSIUM TRIPOLYPHOSPHATE
0508		POTATO FLAKES
0396		POTATO STARCH
0101	.02-	DL-PROLINE
0521	.01-	PROPANETHIOL
0922	.03	PROPENYLGUAETHOL
0923	.13	PROPIONALDEHYDE
0163	.03	PROPIONIC ACID
0925	-	PROPYL ACETATE
0928	.38	PROPYL ALCOHOL
0930	-	P ₃ -PROPYL ANISOLE
0934	.10	PROPYL BUTYRATE
0938	.37	PROPYL CINNAMATE
0228	.36	PROPYL DISULFIDE
0164	.04	PROPYLENE GLYCOL
0397	.01	PROPYLENE GLYCOL ALGINATE
0419	.07	PROPYLENE GLYCOL DIBENZOATE
0222	.20	PROPYLENE GLYCOL MONO- AND DIESTERS OF FATTY ACIDS
0309	.07-	PROPYLENE GLYCOL MSTEARAT
0943	.12-	PROPYL FORMATE

SUBS NO	TF VALUE	SUBSTANCE
1945	.12-	PROPYL 2-FURANACRYLATE
1165	.02-	PROPYL GALLATE
1948	.09-	PROPYL HEPTANOATE
1949	.16	PROPYL HEXANOATE
1952	-	3-PROPYLIDENEPHTHALIDE
1166	1.75	PROPYLPARABEN
1956	.29	PROPYL PROPIONATE
1398	.08	PROTEIN HYDROLYSATE
1963	.06-	PULEGONE
1966	.02	PYRIDINE
1167	.29	PYRIDOXINE HYDROCHLORIDE
1967	.88	PYROLIGNEOUS ACID
1523	.05-	PYRROLIDINE
1968	.16-	PYRULIGNEOUS ACID, EXT
1969	.05-	PYRUVALDEHYDE
1970	.42	PYRUVIC ACID
1971	.04	QUASSIA, EXTRACT
1972	.09	QUEBRACHO BARK, EXTRACT
1973	-	QUILLAJA
1976	.02-	QUININE HYDROCHLORIDE
1224	.05	QUININE SULFATE
147C	.64	QUINOLINE
1506		RAISINS - BLANCHED
1505		RAISINS - DARK
1437		RAPE SEED OIL, HYDROGENAT
1168	.02-	RENNET
1032		L-RHAMNOSE
1979	.03-	RHATANY, EXTRACT
1980	.06-	RHODINOL
1981	.11-	RHODINYL ACETATE
1982	.04	RHODINYL BUTYRATE
1984	.12-	RHODINYL FORMATE
1141	.14-	RHUBARB ROOT (RHEUM SPP.)
1169	.02	RIBOFLAVIN
1170	1.55	RIBOFLAVIN 5-PHOSPHATE
1033		RICE FLOUR
1512		RICE, MILLED
1988		ROSE, ABSOLUTE (ROSA SPP.)
1989	.07	ROSE, BULGARIAN, TRUE OTTO, OIL (ROSA DAMASCENA MILL.)
1990		ROSE HIPS, EXTRACT (ROSA SPP.)
1992	.23	ROSEMARY, OIL (ROSEMARINUS OFFICINALIS L.)
1503		ROSEMARY, OLEORESIN
1991	.11	ROSEMARY (ROSEMARINUS OFFICINALIS L.)
1236	.11-	ROSE OXIDE
1995	.05-	RUE, OIL
1554		RYE FLOUR, WHITE
1476		RYE SOUR
1054	.01	SACCHARIN, CALCIUM SALT
1171	.15	SACCHARIN, SODIUM SALT
1607	.14	SAFFRON
1999	.03	SAFFRON, EXTRACT
1214	-	SAGE, GREEK (SALVIA TRILOBA L.)

SUBS NO	TF VALUE	SUBSTANCE
3001	.26	SAGE, OIL (SALVIA OFFICINALIS L.)
3002	.79	SAGE, OLEORESIN (SALVIA OFFICINALIS L.)
3000	.08	SAGE (SALVIA OFFICINALIS L.)
3003	.24	SAGE, SPANISH, OIL (SALVIA LAVANDULAEFOLIA VAHL.)
3004	.13	SALICYLALDEHYDE
3005	.08-	SANDALWOOD, YELLOW, OIL
3009	.12-	SARSAPARILLA, EXTRACT
3010	.14-	SASSAFRAS BARK, EXTR
313		SAUSAGE CASINGS
3012	.22	SAVORY, SUMMER
3013	.07-	SAVORY, SUMMER, OIL
3015	.05	SAVORY, WINTER (SATUREJA MONTANA L.)
3018	.18	SCHINUS MOLLE, OIL
3261	.11-	2-SEC-BUTYLCYCLOHEXANONE
3131	.01-	SEC-BUTYL ETHYL ETHER
3148	.10-	SENNA, ALEXANDRIA (CASSIA ACUTIFOLIA DELILE)
3500	.03-	SESAME SEED
3590	.02	SHELLAC
3553		SHORTENING, VEGETABLE
3174	.03-	SILICA AEROGEL
3478		SILICON ANTIFOAM
3230	.17	SILICON DIOXIDE
3021	.04-	SLOE BERRIES, EXTRACT (PRUNUS SPINOSA L.)
3022	.10-	SLOE BERRIES, EXTRACT SOLID (PRUNUS SPINOSA L.)
3020	.16	SLOE BERRIES (PRUNUS SPINOSA L.)
3566	1.24	SMOKE FLAVORS
3023	-	SNAKEROOT, CANADIAN, OIL
3175	.05-	SODIUM ACETATE
3176	.04	SODIUM ACID PYROPHOSPHATE
3177	.14	SODIUM ALGINATE
3179	.04	SODIUM ALUMINUM PHOSPHATE, ACIDIC
3348	.05-	SODIUM ALUMINUM PHOSPHATE, BASIC
3178		SODIUM ALUMINUM SILICATE
3180	-	SODIUM ASCORBATE
3181	.09	SODIUM BENZOATE
3182	.01-	SODIUM BICARBONATE
3738		SODIUM BISULFATE
3183	.04	SODIUM BISULFITE
3185	.87	SODIUM CARBONATE
3186	.22	SODIUM CARBOXYMETHYLCELLULOSE
3187	-	SODIUM CASEINATE
3188	.11-	SODIUM CHLORIDE
3316	.20-	SODIUM CHLORITE
3189	.05-	SODIUM CITRATE
3190	.14	SODIUM DIACETATE
3317	.06	SODIUM ERYTHROBATE
3191	3.28	SODIUM GLUCONATE
3192	.05	SODIUM HYDROXIDE
3319	.07-	SODIUM HYPOCHLORITE
3495		SODIUM IODIDE
3347	.09	SODIUM LAURYL SULFATE
3193	.16	SODIUM METABISULFITE

JBS NO	TF VALUE	SUBSTANCE
94	.12	SODIUM METAPHOSPHATE (SODIUM HEXAMETAPHOSPHATE)
142	.06-	SODIUM NITRATE
143	.01-	SODIUM NITRITE
97	.02	SODIUM PHOSPHATE, DIBASIC
98		SODIUM PHOSPHATE, MONOBASIC
99	.04-	SODIUM PHOSPHATE, TRIBASIC
101	.03-	SODIUM PROPIONATE
102	.04	SODIUM PYROPHOSPHATE (TETRASODIUM PYROPHOSPHATE)
179		SODIUM SILICATE
147	.39	SODIUM STEAROYL-2-LACTYLATE
146	.07-	SODIUM STEARYL FUMARATE
180	.04-	SODIUM SULFATE
106	.01	SODIUM SULFITE, ALKALINE
151	.07-	SODIUM SULFITE, NEUTRAL
109	.32	SODIUM THIOSULFATE (5H2O)
110	.09-	SODIUM TRIPOLYPHOSPHATE
111	.05	SORBIC ACID
101	1.02	SORBITAN MONOSTEARATE
112	.36	SORBITOL
186		SOYBEAN FLOUR
107		SOYBEAN OIL
134		SOY CONCENTRATE, ENZ ACT
139		SOY DERIVATIVES
146	.02	SOY PROTEIN, ISOLATED
128	.45	SOY SAUCE ORIENTAL
150	.01-	SPEARMINT
131	.14-	SPEARMINT, EXTRACT
132	.01	SPEARMINT, OIL
133	.09-	SPIKE LAVENDER, OIL
153	.51	SPIKENARD EXT.
134	.08-	SPRUCE, OIL
113	.54	STANNOUS CHLORIDE (2 H2O)
102		STARCH
125	.03	STARCH, MODIFIED
179	.04	STEARIC ACID
115	.02-	STERCULIA GUM
194		ST JOHNS BREAD SOLID, EXT.
136	.05-	STORAX
196		STRAWBERRY, JUICE
137	.03	STYRAX, EXTRACT
197		STYRAX, OIL
133	.08-	STYRENE
116	.53	SUCCINIC ACID
156	.12-	SUCCINYLATED MONOGLYCERIDES
158	.07-	SUCROSE ACETATE ISOBUTYRATE
192		SUCROSE-INVERT SUGAR BLND
160		SUCROSE LIQUID
138	.06	SUCROSE OCTAACETATE
158		SUGAR BEET EXTRACT FLAVOR BASE
195		SUGAR, SOLID, EXT.
117	.11	SULFUR DIOXIDE
140	.16	TAGETES, OIL

SUBS NO	TF VALUE	SUBSTANCE
1567	.06-	TALC
1568		TALLOW, HYDROGENATED
1375	.98	TAMARIND, EXTRACT
1215	.10-	TAMARIND, EXTRACT (TAMARINDUS INDICA L.)
1645		TAMARINDS
1081		TANGELO OIL
1541		TANGERINE ESSENCE, NAT
1041	.01-	TANGERINE, OIL
1330	.12	TANNIC ACID
1444		TAPIOCA STARCH
1043	.45	TARRAGON
1219	.13-	TARTARIC ACID
1026	.67	TBHQ (TERT-BUTYLHYDROQUINONE)
1397	.05-	TEA, EXTRACT
1398	.03	TEA TREE, OIL
1721	.11	TENOX (ALL KINDS)
1045	.02	α-TERPINEOL
1046	.03	TERPINOLENE
1047	.04-	TERPINYL ACETATE
1049	.11-	TERPINYL BUTYRATE
1052	-	TERPINYL FORMATE
1053	.76	TERPINYL PROPIONATE
1590		γ-TETRADECALACTONE
1055	.20	TETRAHYDROFURFURYL ACETAT
1056	1.09	TETRAHYDROFURFURYL ALCOHOL
1057	.13-	TETRAHYDROFURFURYL BUTYRA
1058	.17	TETRAHYDROFURFURYL PROPIO
1060	.03-	TETRAHYDROLINALOOL
1321	9.22	5,6,7,8-TETRAHYDROQUINOXALINE
1061	.12-	TETRAMETHYL-ET-CYCLOHEXEN
1237	.17	2,3,5,6-TETRAMETHYLPYRAZINE
1392	.03	TETRASODIUM EDTA
1322	.05	THIAMINE HYDROCHLORIDE
1222	.01	THIAMINE MONONITRATE
1323		2-THIENYL DISULFIDE
1062	.12-	2-THIENYL MERCAPTAN
1238	.06	2,2-THIODIMETHYLENE-DIFUR
1472	.15	THIOGERANOL
1225		L-THREONINE
1064	.21	THYME, OIL (THYMUS VULGARIS L.)
1504		THYME, OLEORESIN
1063	.10	THYME (THYMUS VULGARIS L.)
1066	.03-	THYMOL
1488	.11	TITANIUM DIOXIDE
1674		ε-TOCOPHEROL
1230		D-α-TOCOPHEROL CONC
1227	.09-	TOCOPHEROLS CONC MIXED
1068		TOLUALDEHYDES
1067	.06-	TOLUALD. GLYCERYL ACETAL
1069	.09-	TOLU, BALSAM, EXTRACT
1070	.18	TOLU, BALSAM, GUM
1240	.07-	o-TOLUENETHIOL

UBS NO	TF VALUE	SUBSTANCE
653	.71	TOLVALDEHYDES, PARA
071	.12-	P2-TOLYLACETALDEHYDE
073	.08-	P2-TOLYL ACETATE
072	.08-	O-TOLYL ACETATE
387	.08-	P-TOLYL 3-METHYLBUTYRATE
077	.07-	P2-TOLYL PHENYLACETATE
078	.13-	2-P2-TOLYL PROPIONALDEHYD
232	.05-	TRAGACANTH
338	.73	2-TRIDECANONE
082	.09	2-TRIDECENAL
083	.30	TRIETHYL CITRATE
241	.76	TRIMETHYLAMINE
474	.52	2,6,6-TRIMETHYL-1-CYCLOHEXEN-1-ACETALDEHYDE
525	.16-	2,4,5-TRIMETHYL-68-3-OXAZOLINE
524		3,5,5-TRIMETHYLMEXANAL
324	1.99	3,5,5-TRIMETHYL-1-HEXANOL
244	.08	2,3,5-TRIMETHYLPYRAZINE
325	.16-	2,4,5-TRIMETHYLTHIAZOLE
475	.05-	TRITHIOACETONE
236		L-TRYPTOPHAN
084	2.73	TUBEROSE, OIL
605	-	TURMERIC
086	.13-	TURMERIC, EXTRACT
606	.12	TURMERIC OLEORESIN
6700		TURPENTINE, RECTIFIED
6089	.34	TURPENTINE, STEAM DIS
0238		L-TYROSINE
6422	.39	2,4-UNDECADIENAL
6091	.05-	E8-UNDECALACTONE
6092	.11-	UNDECANAL
6245	1.50	UNDECANOIC ACID
6093	.06	2-UNDECANONE
6094	.04-	9-UNDECENAL
6095	.05	10-UNDECENAL
6247	.06-	10-UNDECENOIC ACID
6161	.17-	UNDECEN-1-OL
6096	.13-	10-UNDECEN-1-YL ACETATE
6097	.13-	UNDECYL ALCOHOL
0589		UREA
6443	.47	VALENCENE
6098	.01	VALERALDEHYDE
6099	.13	VALERIAN ROOT, EXTR
6100	.10-	VALERIAN ROOT, OIL
6101	.77	VALERIC ACID
6103	.12-	E8-VALEROLACTONE
0240		L-VALINE
6444	.13-	D,L-VALINE
6105		VANILLA, EXTRACT (VANILLA SPP.)
6106	.18	VANILLA, OLEORESIN (VANILLA SPP.)
6104	.03-	VANILLA (VANILLA SPP.)
6336	.03	VANILLIN
6609	.20-	VEGETABLE JUICE

SUBS NO.	TF VALUE	SUBSTANCE
0436		VEGETABLE OIL
0438	.01-	VEGETABLE OIL, HYDROGENAT
0311	.03-	VEGETABLE PROTEIN, HYDROLYZED
3109	.04	VERATRALDEHYDE
6163	.04	VERONICA (VERONICA OFFICINALIS L.)
5166	.05-	VETIVER, OIL (VETIVERIA ZIZANIODES STAFF)
6165	5.72	VETIVER (VETIVERIA ZIZANIODES STAFF)
2743	-	VIOLET ALPINE
3110	.29	VIOLET LEAVES, ABSOL
0241	.46	VITAMIN A
0242	.14-	VITAMIN A ACETATE
0243	.01	VITAMIN A PALMITATE
0246	.13-	VITAMIN D3
0245	.15-	VITAMIN D2
0447	1.69	VITAMIN K
3111	.04	WALNUT HULL, EXTRACT
5313	.02	WASHING OR LYE PEELING FRUITS AND VEGETABLES, CHEMICALS US
0332	.04-	WAX, SHELLAC
0445		WAXY MAIZE STARCH
0552		WHEAT BRAN
0462		WHEAT GERM
0465		WHEAT GLUTEN, VITAL
0404		WHEAT STARCH
5399	.17	WHEY
0483		WHEY, DEMINERALIZED
5704	.20	WHEY, DEMINERALIZED/DEACTOSED/ELECTRODIALYZED
8000		WHOLE WHEAT FLOUR; STONE-GROUND WHOLE WHEAT FLOUR
3113	.09-	WINTERGREEN, OIL
4408	.05-	WOODRUFF, SWEET
3114		WORMWOOD
3116	.10-	WORMWOOD, OIL
3249	2.20	2,6-XYLENOL
3606		D-XYLOSE
4409	.10-	YARA YARA
3117	.75	YARROW, HERB (ACHILLEA MILLEFOLIUM L.)
0481	.14-	YEAST EXTRACT
0460		YEAST, INACTIVE (DRY)
0405		YEAST PASTES
0333	.24	YEASTS
0365	1.10	YEASTS, AUTOLYZED
5271	.04	YEASTS, DRIED
5396	.80	YELLOW PRUSSIAN OF SODA/SODIUM FERROCYANIDE (10H2O)
3118	.27	YERBA SANTA, FLD EXTR
3119	.04	YLANG YLANG, OIL
0339		YUCCA EXTRACT
3120	.15	YUCCA, JOSHUA TREE (YUCCA BREVI-FOLIA ENGELM.)
3121	.08-	YUCCA, MOHAVE, EXTRACT (YUCCA SPP.)
3122	.14-	ZEDOARY
0334	.01-	ZEIN, POWDER
0248	.38	ZINC GLUCONATE
0249	2.17	ZINC OXIDE
0251	1.96	ZINC SULFATE (7 H2O)
3124	.06-	ZINGERONE