

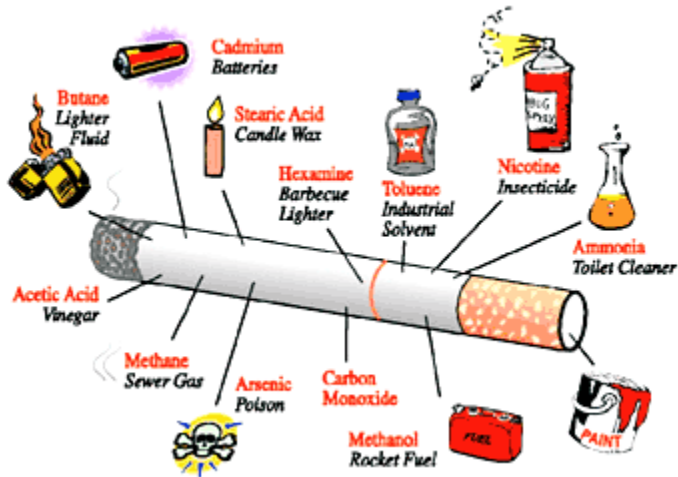
Chemicals in Tobacco Smoke

There are over 4,000 chemicals in tobacco smoke and at least 69 of those chemicals are known to cause cancer.

The list of 599 additives approved by the US Government for use in the manufacture of cigarettes is something every smoker should see. Submitted by the five major American cigarette companies to the Dept. of Health and Human Services in April of 1994, this list of ingredients had long been kept a secret.

Tobacco companies reporting this information were:

American Tobacco Company
Brown and Williamson
Liggett Group, Inc.
Philip Morris Inc.
R.J. Reynolds Tobacco Company



While these ingredients are approved as additives for foods, they were not tested by burning them, and it is the burning of many of these substances which changes their properties, often for the worse. **Over 4000 chemical compounds are created by burning a cigarette – 69 of those chemicals are known to cause cancer.** Carbon monoxide, nitrogen oxides, hydrogen cyanides and ammonia are all present in cigarette smoke. Forty-three known carcinogens are in mainstream smoke, sidestream smoke or both. It's chilling to think about not only how smokers poison themselves, but what others are exposed to by breathing in the secondhand smoke. The next time you're missing your old buddy, the cigarette, take a good long look at this list and see them for what they are: a delivery system for toxic chemical and carcinogens.

- Acetanisole
- Acetic Acid
- Acetoin
- Acetophenone
- 6-Acetoxydihydrotheaspirane
- 2-Acetyl-3- Ethylpyrazine
- 2-Acetyl-5-Methylfuran
- Acetylpyrazine
- 2-Acetylpyridine
- 3-Acetylpyridine
- 2-Acetylthiazole
- Aconitic Acid
- dl-Alanine
- Alfalfa Extract
- Allspice Extract,Oleoresin, and Oil
- Allyl Hexanoate
- Allyl Ionone
- Almond Bitter Oil
- Amberggris Tincture
- Ammonia
- Ammonium Bicarbonate
- Ammonium Hydroxide
- Ammonium Phosphate Dibasic
- Ammonium Sulfide
- Amyl Alcohol
- Amyl Butyrate
- Amyl Formate
- Amyl Octanoate
- alpha-Amylcinnamaldehyde
- Amyris Oil
- trans-Anethole
- Angelica Root Extract, Oil and Seed Oil
- Anise
- Anise Star, Extract and Oils
- Anisyl Acetate
- Anisyl Alcohol
- Anisyl Formate
- Anisyl Phenylacetate
- Apple Juice Concentrate, Extract, and Skins
- Apricot Extract and Juice Concentrate
- 1-Arginine
- Asafetida Fluid Extract And Oil
- Ascorbic Acid
- 1-Asparagine Monohydrate
- 1-Aspartic Acid
- Balsam Peru and Oil
- Basil Oil
- Bay Leaf, Oil and Sweet Oil
- Beeswax White
- Beet Juice Concentrate
- Benzaldehyde
- Benzaldehyde Glyceryl Acetal
- Benzoic Acid, Benzoin
- Benzoin Resin
- Benzophenone
- Benzyl Alcohol
- Benzyl Benzoate
- Benzyl Butyrate
- Benzyl Cinnamate
- Benzyl Propionate
- Benzyl Salicylate
- Bergamot Oil
- Bisabolene
- Black Currant Buds Absolute
- Borneol
- Bornyl Acetate
- Buchu Leaf Oil
- 1,3-Butanediol
- 2,3-Butanedione
- 1-Butanol
- 2-Butanone
- 4(2-Butenylidene)-3,5,5-Trimethyl-
- Ethyl Oleate
- Ethyl Palmitate
- Ethyl Phenylacetate
- Ethyl Propionate
- Ethyl Salicylate
- Ethyl trans-2-Butenoate
- Ethyl Valerate
- Ethyl Vanillin
- 2-Ethyl (or Methyl)-(3,5 and 6)-Methoxypyrazine
- 2-Ethyl-1-Hexanol, 3-Ethyl -2 -Hydroxy-2-Cyclopenten-1-One
- 2-Ethyl-3, (5 or 6)-Dimethylpyrazine
- 5-Ethyl-3-Hydroxy-4-Methyl-2 (5H)-Furanone
- 2-Ethyl-3-Methylpyrazine
- 4-Ethylbenzaldehyde
- 4-Ethylguaiaicol
- para-Ethylphenol
- 3-Ethylpyridine
- Eucalyptol
- Farnesol
- D-Fenchone
- Fennel Sweet Oil
- Fenugreek, Extract, Resin, and Absolute
- Fig Juice Concentrate
- Food Starch Modified
- Furfuryl Mercaptan
- 4-(2-Furyl)-3-Buten-2-One
- Galbanum Oil
- Genet Absolute
- Gentian Root Extract
- Geraniol
- Geranium Rose Oil
- Geranyl Acetate
- Geranyl Butyrate
- Geranyl Formate
- Geranyl Isovalerate
- Geranyl Phenylacetate
- Ginger Oil and Oleoresin
- 1-Glutamic Acid
- 1-Glutamine
- Glycerol
- Glycyrrhizin Ammoniated
- Grape Juice Concentrate
- Guaiac Wood Oil
- Guaiacol
- Guar Gum
- 2,4-Heptadienal
- gamma-Heptalactone
- Heptanoic Acid
- 2-Heptanone
- 3-Hepten-2-One
- 2-Hepten-4-One
- 4-Heptenal
- trans -2-Heptenal
- Heptyl Acetate
- omega-6-Hexadecenlactone
- gamma-Hexalactone
- Hexanal
- Hexanoic Acid
- 2-Hexen-1-Ol
- 3-Hexen-1-Ol
- cis-3-Hexen-1-Yl Acetate
- 2-Hexenal
- 3-Hexenoic Acid
- trans-2-Hexenoic Acid
- cis-3-Hexenyl Formate
- Hexyl 2-Methylbutyrate
- Hexyl Acetate
- Hexyl Alcohol
- Hexyl Phenylacetate
- 1-Histidine
- Honey
- 3-Methylthiopropionaldehyde
- Methyl 3-Methylthiopropionate
- 2-Methylvaleric Acid
- Mimosa Absolute and Extract
- Molasses Extract and Tincture
- Mountain Maple Solid Extract
- Mullein Flowers
- Myristaldehyde
- Myristic Acid
- Myrrh Oil
- beta-Naphthyl Ethyl Ether
- Nerol
- Neroli Bigarde Oil
- Nerolidol
- Nona-2-trans,6-cis-Dienal
- 2,6-Nonadien-1-Ol
- gamma-Nonalactone
- Nonanal
- Nonanoic Acid
- Nonanone
- trans-2-Nonen-1-Ol
- 2-Nonenal
- Nonyl Acetate
- Nutmeg Powder and Oil
- Oak Chips Extract and Oil
- Oak Moss Absolute
- 9,12-Octadecadienoic Acid (48%) And 9,12,15-Octadecatrienoic Acid (52%)
- delta-Octalactone
- gamma-Octalactone
- Octanal
- Octanoic Acid
- 1-Octanol
- 2-Octanone
- 3-Octen-2-One
- 1-Octen-3-Ol
- 1-Octen-3-Yl Acetate
- 2-Octenal
- Octyl Isobutyrate
- Oleic Acid
- Olibanum Oil
- Opoponax Oil And Gum
- Orange Blossoms Water, Absolute, and Leaf Absolute
- Orange Oil and Extract
- Origanum Oil
- Orris Concrete Oil and Root Extract
- Palmarosa Oil
- Palmitic Acid
- Parsley Seed Oil
- Patchouli Oil
- omega-Pentadecalactone
- 2,3-Pentanedione
- 2-Pentanone
- 4-Pentenoic Acid
- 2-Pentylpyridine
- Pepper Oil, Black And White
- Peppermint Oil
- Peruvian (Bois De Rose) Oil
- Petitgrain Absolute, Mandarin Oil and Terpeneless Oil
- alpha-Phellandrene
- 2-Phenethyl Acetate
- Phenethyl Alcohol
- Phenethyl Butyrate
- Phenethyl Cinnamate
- Phenethyl Isobutyrate
- Phenethyl Isovalerate
- Phenethyl Phenylacetate
- Phenethyl Salicylate
- 1-Phenyl-1-Propanol
- 3-Phenyl-1-Propanol
- 2-Phenyl-2-Butenal

- 2-Cyclohexen-1-One
- Butter, Butter Esters, and Butter Oil
- Butyl Acetate
- Butyl Butyrate
- Butyl Butyryl Lactate
- Butyl Isovalerate
- Butyl Phenylacetate
- Butyl Undecylenate
- 3-Butylideneephthalide
- Butyric Acid]
- Cadinene
- Caffeine
- Calcium Carbonate
- Camphene
- Cananga Oil
- Capsicum Oleoresin
- Caramel Color
- Caraway Oil
- Carbon Dioxide
- Cardamom Oleoresin, Extract, Seed Oil, and Powder
- Carob Bean and Extract
- beta-Carotene
- Carrot Oil
- Carvacrol
- 4-Carvomenthenol
- 1-Carvone
- beta-Caryophyllene
- beta-Caryophyllene Oxide
- Cascarilla Oil and Bark Extract
- Cassia Bark Oil
- Cassie Absolute and Oil
- Castoreum Extract, Tincture and Absolute
- Cedar Leaf Oil
- Cedarwood Oil Terpenes and Virginiana
- Cedrol
- Celery Seed Extract, Solid, Oil, And Oleoresin
- Cellulose Fiber
- Chamomile Flower Oil And Extract
- Chicory Extract
- Chocolate
- Cinnamaldehyde
- Cinnamic Acid
- Cinnamon Leaf Oil, Bark Oil, and Extract
- Cinnamyl Acetate
- Cinnamyl Alcohol
- Cinnamyl Cinnamate
- Cinnamyl Isovalerate
- Cinnamyl Propionate
- Citral
- Citric Acid
- Citronella Oil
- dl-Citronellol
- Citronellyl Butyrate
- itronellyl Isobutyrate
- Civet Absolute
- Clary Oil
- Clover Tops, Red Solid Extract
- Cocoa
- Cocoa Shells, Extract, Distillate And Powder
- Coconut Oil
- Coffee
- Cognac White and Green Oil
- Copaiba Oil
- Coriander Extract and Oil
- Corn Oil
- Corn Silk
- Costus Root Oil
- Cubeb Oil
- Cuminaldehyde
- Hops Oil
- Hydrolyzed Milk Solids
- Hydrolyzed Plant Proteins
- 5-Hydroxy-2,4-Decadienoic Acid delta-Lactone
- 4-Hydroxy-2,5-Dimethyl-3(2H)-Furanone
- 2-Hydroxy-3,5,5-Trimethyl-2-Cyclohexen-1-One
- 4-Hydroxy -3-Pentenoic Acid Lactone
- 2-Hydroxy-4-Methylbenzaldehyde
- 4-Hydroxybutanoic Acid Lactone
- Hydroxycitronellal
- 6-Hydroxydihydrotheaspirane
- 4-(para-Hydroxyphenyl)-2-Butanone
- Hyssop Oil
- Immortelle Absolute and Extract
- alpha-Ionone
- beta-Ionone
- alpha-Irone
- Isoamyl Acetate
- Isoamyl Benzoate
- Isoamyl Butyrate
- Isoamyl Cinnamate
- Isoamyl Formate, IsoamylHexanoate
- Isoamyl Isovalerate
- Isoamyl Octanoate
- Isoamyl Phenylacetate
- Isobornyl Acetate
- Isobutyl Acetate
- Isobutyl Alcohol
- Isobutyl Cinnamate
- Isobutyl Phenylacetate
- Isobutyl Salicylate
- 2-Isobutyl-3-Methoxypyrazine
- alpha-Isobutylphenethyl Alcohol
- Isobutyraldehyde
- Isobutyric Acid
- d,l-Isoleucine
- alpha-Isomethylionone
- 2-Isopropylphenol
- Isovaleric Acid
- Jasmine Absolute, Concrete and Oil
- Kola Nut Extract
- Labdanum Absolute and Oleoresin
- Lactic Acid
- Lauric Acid
- Lauric Aldehyde
- Lavandin Oil
- Lavender Oil
- Lemon Oil and Extract
- Lemongrass Oil
- 1-Leucine
- Levulinic Acid
- Licorice Root, Fluid, Extract and Powder
- Lime Oil
- Linalool
- Linalool Oxide
- Linalyl Acetate
- Linden Flowers
- Lovage Oil And Extract
- 1-Lysine]
- Mace Powder, Extract and Oil
- Magnesium Carbonate
- Malic Acid
- Malt and Malt Extract
- Maltodextrin
- Maltol
- Maltyl Isobutyrate
- Mandarin Oil
- Maple Syrup and Concentrate
- Mate Leaf, Absolute and Oil
- para-Mentha-8-Thiol-3-One
- 4-Phenyl-3-Buten-2-Ol
- 4-Phenyl-3-Buten-2-One
- Phenylacetaldehyde
- Phenylacetic Acid
- 1-Phenylalanine
- 3-Phenylpropionaldehyde
- 3-Phenylpropionic Acid
- 3-Phenylpropyl Acetate
- 3-Phenylpropyl Cinnamate
- 2-(3-Phenylpropyl)Tetrahydrofuran
- Phosphoric Acid
- Pimenta Leaf Oil
- Pine Needle Oil, Pine Oil, Scotch
- Pineapple Juice Concentrate
- alpha-Pinene, beta-Pinene
- D-Piperitone
- Piperonal
- Pipsissewa Leaf Extract
- Plum Juice
- Potassium Sorbate
- 1-Proline
- Propenylguaethol
- Propionic Acid
- Propyl Acetate
- Propyl para-Hydroxybenzoate
- Propylene Glycol
- 3-Propylideneephthalide
- Prune Juice and Concentrate
- Pyridine
- Pyroigneous Acid And Extract
- Pyrrole
- Pyruvic Acid
- Raisin Juice Concentrate
- Rhodinol
- Rose Absolute and Oil
- Rosemary Oil
- Rum
- Rum Ether
- Rye Extract
- Sage, Sage Oil, and Sage Oleoresin
- Salicylaldehyde
- Sandalwood Oil, Yellow
- Sclareolide
- Skatole
- Smoke Flavor
- Snakeroot Oil
- Sodium Acetate
- Sodium Benzoate
- Sodium Bicarbonate
- Sodium Carbonate
- Sodium Chloride
- Sodium Citrate
- Sodium Hydroxide
- Solanone
- Spearmint Oil
- Styrax Extract, Gum and Oil
- Sucrose Octaacetate
- Sugar Alcohols
- Sugars
- Tagetes Oil
- Tannic Acid
- Tartaric Acid
- Tea Leaf and Absolute
- alpha-Terpineol
- Terpinolene
- Terpinyl Acetate
- 5,6,7,8-Tetrahydroquinoxaline
- 1,5,5,9-Tetramethyl-13-Oxatricyclo(8.3.0.0(4,9))Tridecane
- 2,3,4,5, and 3,4,5,6-Tetramethylethyl-Cyclohexanone
- 2,3,5,6-Tetramethylpyrazine
- Thiamine Hydrochloride
- Thiazole

- para-Cymene
- 1-Cysteine Dandelion Root Solid Extract
- Davana Oil
- 2-trans, 4-trans-Decadienal
- delta-Decalactone
- gamma-Decalactone
- Decanal
- Decanoic Acid
- 1-Decanol
- 2-Decenal
- Dehydromenthofuroloactone
- Diethyl Malonate
- Diethyl Sebacate
- 2,3-Diethylpyrazine
- Dihydro Anethole
- 5,7-Dihydro-2-Methylthieno(3,4-D) Pyrimidine
- Dill Seed Oil and Extract
- meta-Dimethoxybenzene
- para-Dimethoxybenzene
- 2,6-Dimethoxyphenol
- Dimethyl Succinate
- 3,4-Dimethyl-1,2 Cyclopentanedione
- 3,5- Dimethyl-1,2- Cyclopentanedione
- 3,7-Dimethyl-1,3,6-Octatriene
- 4,5-Dimethyl-3-Hydroxy-2,5-Dihydrofuran-2-One
- 6,10-Dimethyl-5,9-Undecadien-2-One
- 3,7-Dimethyl-6-Octenoic Acid
- 2,4 Dimethylacetophenone
- alpha,para-Dimethylbenzyl Alcohol
- alpha,alpha-Dimethylphenethyl Acetate
- alpha,alpha Dimethylphenethyl Butyrate
- 2,3-Dimethylpyrazine
- 2,5-Dimethylpyrazine
- 2,6-Dimethylpyrazine
- Dimethyltetrahydrobenzofuranone
- delta-Dodecalactone
- gamma-Dodecalactone
- para-Ethoxybenzaldehyde
- Ethyl 10-Undecenoate
- Ethyl 2-Methylbutyrate
- Ethyl Acetate
- Ethyl Acetoacetate
- Ethyl Alcohol
- Ethyl Benzoate
- Ethyl Butyrate
- Ethyl Cinnamate
- Ethyl Decanoate
- Ethyl Fenchol
- Ethyl Furoate
- Ethyl Heptanoate
- Ethyl Hexanoate
- Ethyl Isovalerate
- Ethyl Lactate
- Ethyl Laurate
- Ethyl Levulinate
- Ethyl Maltol
- Ethyl Methyl Phenylglycidate
- Ethyl Myristate
- Ethyl Nonanoate
- Ethyl Octadecanoate
- Ethyl Octanoate
- Menthol
- Menthone
- Menthyl Acetate
- dl-Methionine
- Methoprene
- 2-Methoxy-4-Methylphenol
- 2-Methoxy-4-Vinylphenol
- para-Methoxybenzaldehyde
- 1-(para-Methoxyphenyl)-1-Penten-3-One
- 4-(para-Methoxyphenyl)-2-Butanone
- 1-(para-Methoxyphenyl)-2-Propanone
- Methoxyppyrazine
- Methyl 2-Furoate
- Methyl 2-Octynoate
- Methyl 2-Pyrrolyl Ketone
- Methyl Anisate
- Methyl Anthranilate
- Methyl Benzoate
- Methyl Cinnamate
- Methyl Dihydrojasmonate
- Methyl Ester of Rosin, Partially Hydrogenated
- Methyl Isovalerate
- Methyl Linoleate (48%)
- Methyl Linolenate (52%) Mixture
- Methyl Naphthyl Ketone
- Methyl Nicotinate
- Methyl Phenylacetate
- Methyl Salicylate
- Methyl Sulfide
- 3-Methyl-1-Cyclopentadecanone
- 4-Methyl-1-Phenyl-2-Pentanone
- 5-Methyl-2-Phenyl-2-Hexenal
- 5-Methyl-2-Thiophene-carboxaldehyde
- 6-Methyl-3,-5-Heptadien-2-One
- 2-Methyl-3-(para-Isopropylphenyl) Propionaldehyde
- 5-Methyl-3-Hexen-2-One
- 1-Methyl-3Methoxy-4-Isopropylbenzene
- 4-Methyl-3-Pentene-2-One
- 2-Methyl-4-Phenylbutyraldehyde
- 6-Methyl-5-Hepten-2-One
- 4-Methyl-5-Thiazoleethanol
- 4-Methyl-5-Vinylthiazole
- Methyl-alpha-Ionone
- Methyl-trans-2-Butenoic Acid
- 4-Methylacetophenone
- para-Methylanisole
- alpha-Methylbenzyl Acetate
- alpha-Methylbenzyl Alcohol
- 2-Methylbutyraldehyde
- 3-Methylbutyraldehyde
- 2-Methylbutyric Acid
- alpha-Methylcinnamaldehyde
- Methylcyclopentenolone
- 2-Methylheptanoic Acid
- 2-Methylhexanoic Acid
- 3-Methylpentanoic Acid
- 4-Methylpentanoic Acid
- 2-Methylpyrazine
- 5-Methylquinoxaline
- 2-Methyltetrahydrofuran-3-One
- (Methylthio)Methylpyrazine (Mixture Of Isomers)
- 1-Threonine
- Thyme Oil, White and Red
- Thymol
- Tobacco Extracts
- Tocopherols (mixed)
- Tolu Balsam Gum and Extract
- Tolualdehydes
- para-Tolyl 3-Methylbutyrate
- para-Tolyl Acetaldehyde
- para-Tolyl Acetate
- para-Tolyl Isobutyrate
- para-Tolyl Phenylacetate
- Triacetin
- 2-Tridecanone
- 2-Tridecenal
- Triethyl Citrate
- 3,5,5-Trimethyl -1-Hexanol
- para,alpha,alpha-Trimethylbenzyl Alcohol
- 4-(2,6,6-Trimethylcyclohex-1-Enyl)But-2-En-4-One
- 2,6,6-Trimethylcyclohex-2-Ene-1,4-Dione
- 2,6,6-Trimethylcyclohexa-1,3-Dienyl Methan
- 4-(2,6,6-Trimethylcyclohexa-1,3-Dienyl)But-2-En-4-One
- 2,2,6-Trimethylcyclohexanone
- 2,3,5-Trimethylpyrazine
- 1-Tyrosine
- delta-Undercalactone
- gamma-Undercalactone
- Undecanal
- 2-Undecanone, 1
- 0-Undecenal
- Urea
- Valencene
- Valeraldehyde
- Valerian Root Extract, Oil and Powder
- Valeric Acid
- gamma-Valerolactone
- Valine
- Vanilla Extract And Oleoresin
- Vanillin
- Veratraldehyde
- Vetiver Oil
- Vinegar
- Violet Leaf Absolute
- Walnut Hull Extract
- Water
- Wheat Extract And Flour
- Wild Cherry Bark Extract
- Wine and Wine Sherry
- Xanthan Gum
- 3,4-Xylenol
- Yeast