

## The NicoBloc Challenge

## 599 Additives That Have Been Found in Cigarettes

Acetanisole, Acetic Acid, Acetoin, Acetophenone, 6-Acetoxydihydrotheaspirane, 2-Acetyl-3- Ethylpyrazine, 2-Acetyl-5-Methylfuran, Acetylpyrazine, 2-Acetylpyrazine, 3-Acetylpyrazine, 2-Acetylpyrazine, 2-Acetylpyrazine, 2-Acetylpyrazine, 3-Acetylpyrazine, 3-Acetylpyr Acetylpyridine, 2-Acetylthiazole, Aconitic Acid, dl-Alanine, Alfalfa Extract, Allspice Extract, Oleoresin, And Oil, Allyl Hexanoate, Allyl Ionone, Almond Bitter Oil, Ambergris 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 alpna-Amylcinnamaldenyde, Amylris Oli, trans-Anethole, Angelica Root Extract, Oli and Seed Oli, Anise Star, Extract and Olis, Anisyl Alcohol, Butterylidene)-3,5,5-Trimethyl-2-Cyclohexen-1-One, Butter, Butter Esters, and Butter Oil, Butyl Acetate, Butyl Butyrate, Butyl Butyryl Lactate, Butyl Isovalerate, Butyl Phenylacetate, Butyl Undecylenate, 3-Butylidenephthalide, 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, Citronellol, Butyrate, Citronellyl 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, 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, Dehydromenthofurolactone, Diethyl Malonate, Diethyl Sebacate, 2,3-Diethylpyrazine, Dihydro Anethole, 5,7-Dihydro-2-Methylthieno(3,4-D) Pyrimidine, Dill Seed Oil and Extract, meta-Dimethovybenzene, para-Dimethovybenzene, 2,6-Dimethovybenzene, Dimethyl Seed Oil and Extract, meta-Dimethyl-1,2-Cyclopentanedione, 3,7-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, 2 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, Ethyl Oleate, Ethyl Palmitate, Ethyl Phenylacetate, Ethyl Propionate, Ethyl Salicylate, Ethyl trans-2-Butenoate, 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)-Furianone, 2-Ethyl-3-Methylpyrazine, 4-Ethylbenzaldehyde, 4-Ethylguaiacol, 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, Grápe Júice 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-OI, 3-Hexen-1-OI, cis-3-Hexen-1-YI 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, Hops Oil, Hydrolyzed Milk Solids, Hydrolyzed Plant Proteins, 5-Hydroxy-2-Hexelion 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 bytypate) Oil, Immortelle Absolute and Extract, alpha-Ionone, beta-Ionone, alpha-Irone, Isoamyl Acetate, Isoamyl Benzoate, Isoamyl Butyrate, Isoamyl Formate, Isoamyl Hexanoate, Isoamyl Isovalerate, Isoamyl Iso Octanoate, Isoamyl Phenylacetate, Isobornyl Acetate, Isobutyl Acetate, Isobutyl , Isobutyl Cinnamate, Isobutyl Phenylacetate, Isobutyl Salicylate,2-Isobutyl-3-Methoxypyrazine, alpha-Isobutylphenethyl Alcohol, Isobutyraldehyde, Isobutyric Acid, d.I-Isoleucine, alpha-Isomethylionone, 2-Isopropylphenol, Isovaleric Acid, dasmine 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, 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, Methoxypyrazine, Methyl 2-Furoate, Methyl 2-Octynoate, Methyl 2-Pyrrolyl Ketone, Methyl Anisate, Methyl Anisate, Methyl Benzoate, Methyl Cinnamate, Methyl Dihydrojasmonate, Methyl Ester of Rosin, P artially Hydrogenated, Methyl Isovalerate, Methyl Linoleate (48%), Methyl Linoleate (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-Thiophenecarboxaldehyde, 6-Methyl-3,-5-Heptadien-2-One, 2-Methyl-3-(para-Isopropylphenyl) Propionaldehyde, 5-Methyl-3-Hexen-2-One, 1-Methyl-3-Methoxy-4-Isopropylbenzene, 4-Methyl-3-Pentanone, 2-Methyl-4-Phenylbutyraldehyde, 6-Methyl-5-Thiozoleethanol,4-Methyl-5-Vinylthiazole, Methyl-alpha-lonone, 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), 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-Napthyl 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-Phenenthyl Acetate, Phenenthyl Alcohol, Phenethyl Butyrate, Phenethyl Cinnamate, Phenethyl Isobutyrate, Phenethyl Isovalerate, Phenethyl Phenylacetate, Phenethyl Salicylate, 1-Phenyl-1-Propanol, 3-Phenyl-1-Propanol, 3-Phenyl-2-Butenal, 4-Phenyl-3-Buten-2-OI,4-Phenyl-3-Buten-2-One, Phenylacetaldehyde, Phenylacetic Acid, 1-Phenylalanine, 3-Phenylpropionaldehyde, 3-Phenylpropionic Acid, 3-Phenyl-3-Buten-2-OI,4-Phenyl-3-Buten-2-One, Phenylacetaldehyde, Phenylacetic Acid, 1-Phenylalanine, 3-Phenylpropionaldehyde, 3-Phenylpropionic Acid, 3-Phenyl-3-Buten-2-OI,4-Phenyl-3-Buten Phenyl-2-Butenal, 4-Phenyl-3-Buten-2-Ol,4-Phenyl-3-Buten-2-One, Phenylacetaldehyde, Phenylacetal 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, Propylguaethol, Propyl Acetate, Propyl para-Hydroxybenzoate, Propylene Glycol, 3-Propylidenephthalide, Prune Juice and Concentrate, Pyridine, Pyroligneous 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 Hydroxchloride, Thiazole, 1-Threonine, Thyme Oil, White and Red, Thymol, Tobacco Extracts, Tochopherols (mixed), Tolus Acetate, para-Tolyl Acetate, para-Tolyl Acetate, para-Tolyl Acetate, Triacetin, 2-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-Trimethylcyclohexa-1,3-Dienyl)But-2-En-4-One,2,2,6-Trimethylcyclohexa-1,3-Dienyl Trimethylpyrazine, 1-Tyrosine, delta-Undercalactone, gamma-Undecalactone, Undecanal, 2-Undecanone, 10-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.