Tobacco Product: Brand X Cigarette

All tobacco products contain chemicals.

The purpose of this list is to provide information about the chemicals in this tobacco product that researchers have linked to health problems. Research is on going to find out which chemicals in tobacco and tobacco smoke cause harm.

There may be other health problems and chemicals that have not been discovered yet.

Tobacco companies test their cigarettes for these chemicals and report the amounts to the FDA.

Please note: There is no safe tobacco product. Based on what we currently know, you can not tell your chance of developing a health problem by the number of chemicals or the amount of a chemical in a tobacco product.

Amount Per Gram	Amount Per Cigarette	CHEMICAL	Cancer	Lung Disease	Heart and Blood Vessel Problems	Reproductive Problems	Addiction
	770 - 864 µg	Acetaldehyde	■	■			■
	✦	Acetamide	■				
✦	✦	Acetone		■			
✦	60 – 240 µg	Acrolein		■	■		
	✦	Acrylamide	■				
	3 - 15 µg	Acrylonitrile	■	■			
		Aflatoxin B1	■				
	ND	4-Aminobiphenyl	■				
	3 - 4 ng	1-Aminonaphthalene	■				
	ND	2-Aminonaphthalene	■				
170 - 370 mg	10 - 130 µg	Ammonia		■			
✦	✦	Anabasine					■
✦	✦	o-Anisidine	■				
40 - 120 ng	✦	Arsenic	■		■	■	
	✦	A-α-C (2-Amino-9H-pyrido[2,3-b]indole)	■				
✦	✦	Benz[a]anthracene	■		■		
	✦	Benz[j]aceanthrylene	■				
✦	12 - 50 µg	Benzene	■		■	■	
✦	✦	Benzo[b]fluoranthene	■		■		
	✦	Benzo[k]fluoranthene	■		■		
	✦	Benzo[b]furan	■				
✦	8.5 – 17.6 ng	Benzo[a]pyrene	■				
	✦	Benzo[c]phenanthrene	■				
✦	✦	Beryllium	■				
	✦	1,3-Butadiene	■	■		■	
41 - 62 ng	✦	Cadmium	■	■		■	
✦	✦	Caffeic acid	■				
	14 - 23 mg	Carbon monoxide				■	
✦	✦	Catechol	■				
	✦	Chlorinated dioxins/furans	■			■	
✦	✦	Chromium	■	■		■	
✦	✦	Chrysene	■		■		
✦	✦	Cobalt	■		■		
✦		Coumarin (banned in food)					
✦	✦	Cresols (o-, m-, and p-cresol)	■	■			
✦	ND	Crotonaldehyde	■				
	✦	Cyclopenta[c,d]pyrene	■				
	✦	Dibenz[a,h]anthracene	■				
	✦	Dibenzo[a,e]pyrene	■				
	✦	Dibenzo[a,h]pyrene	■				
	✦	Dibenzo[a,i]pyrene	■				
	✦	Dibenzo[a,l]pyrene	■				
✦	✦	2,6-Dimethylaniline	■				
✦	✦	Ethyl carbamate (urethane)	■			■	
✦	✦	Ethylbenzene	■				

A machine is used to test for these chemicals. The amount of chemical that gets into the body may be higher or lower depending on how a person uses the tobacco product. Companies may use different tests to measure these chemicals. Results may vary.

KEY

Chemicals have been linked to:

- Cancer
- Lung Disease
- Heart and Blood Vessel Problems
- Reproductive Problems
- Addiction

ND Not Detected

✦ The information is not currently available

Where do these chemicals come from?

Many of these chemicals come from the **tobacco leaf** and the **smoke**. The rest come from the filter, glue, ink, paper and additives.

mg= milligram
µg = microgram
ng = nanogram
pg= picogram

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Amount Per Gram	Amount Per Cigarette	CHEMICAL	Cancer	Lung Disease	Heart and Blood Vessel Problems	Reproductive Problems	Addiction
	✦	Ethylene oxide	■	■		■	
✦	10.3 -25 µg	Formaldehyde	■	■			
	✦	Furan	■				
	✦	Glu-P-1 (2-Amino-6-methyldipyrido[1,2-a:3',2'-d] imidazole)	■				
	✦	Glu-P-2 (2-Aminodipyrido[1,2-a:3',2'-d]imidazole)	■				
✦	✦	Hydrazine	■	■			
✦	✦	Hydrogen cyanide		■	■		
	✦	Indeno[1,2,3-cd]pyrene	■				
	✦	IQ (2-Amino-3-methylimidazo[4,5-f]quinoline)	■				
	450 - 1000 µg	Isoprene	■				
✦	✦	Lead	■		■	■	
	✦	MeA-α-C (2-Amino-3-methyl)-9H-pyrido[2,3-b]indole)	■				
✦	✦	Mercury	■			■	
✦	✦	Methyl ethyl ketone		■			
	✦	5-Methylchrysene	■				
0.1 – 1.6 µg	110 - 133 ng	4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)	■				
✦	✦	Naphthalene	■	■			
✦	✦	Nickel	■	■			
11.3 – 26.7 mg	0.1-3.0 mg	Nicotine				■	■
ND	✦	Nitrobenzene	■	■		■	
	✦	Nitromethane	■				
	✦	2-Nitropropane	■				
✦	✦	N-Nitrosodiethanolamine (NDELA)	■				
✦	✦	N-Nitrosodiethylamine (NDEA)	■				
✦	✦	N-Nitrosodimethylamine (NDMA)	■				
✦	✦	N-Nitrosomethylethylamine	■				
✦		N-Nitrosomorpholine (NMOR)	■				
0.9 – 6.9 µg	154 - 196 ng	N-Nitrosonornicotine (NNN)	■				
✦	✦	N-Nitrosopiperidine (NPIP)	■				
✦	✦	N-Nitrosopyrrolidine (NPYR)	■				
✦		N-Nitrososarcosine (NSAR)	■				
✦		Nornicotine					■
✦	✦	Phenol		■	■		
	✦	PhIP (2-Amino-1-methyl-6-phenylimidazo[4,5-b] pyridine)	■				
✦	✦	Polonium-210	■				
✦	✦	Propionaldehyde		■	■		
✦	✦	Propylene oxide	■	■			
✦	✦	Quinoline	■				
✦	✦	Selenium		■			
✦	✦	Styrene	■				
✦	✦	2-Toluidine	■				
✦	ND	Toluene		■		■	
	✦	Trp-P-1 (3-Amino-1,4-dimethyl-5H-pyrido[4,3-b]indole)	■				
	✦	Trp-P-2 (1-Methyl-3-amino-5H-pyrido[4,3-b]indole)	■				
✦		Uranium-235	■	■			
✦		Uranium-238	■	■			
	✦	Vinyl acetate	■	■			
✦	✦	Vinyl chloride	■				

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