



## Tobacco Product: Brand X Roll Your Own Tobacco

Tobacco Amount Per Gram	Smoke Amount Per Cigarette	CHEMICAL	CA	LD	HB	RP	AD
170-370 mg	◆	Ammonia		■			
40-120 ng	◆	Arsenic	■		■	■	
41-62ng	◆	Cadmium	■	■		■	
0.1-1.6 µg	◆	4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)	■				
11.3-26.7 mg	◆	Nicotine				■	■
0.9-6.9 µg	◆	N-Nitrosornicotine (NNN)	■				

### The information is not currently available on the following chemicals.

Tobacco Amount Per Gram	Smoke Amount Per Cigarette	CHEMICAL	CA	LD	HB	RP	AD
	◆	Acetaldehyde	■	■			■
	◆	Acetamide	■				
◆	◆	Acetone		■			
◆	◆	Acrolein		■	■		
	◆	Acrylamide	■				
	◆	Acrylonitrile	■	■			
◆		Aflatoxin B1	■				
	◆	4-Aminobiphenyl	■				
	◆	1-Aminonaphthalene	■				
	◆	2-Aminonaphthalene	■				
◆	◆	Anabasine					■
◆	◆	o-Anisidine	■				
	◆	A-α-C (2-Amino-9H-pyrido[2,3-b]indole)	■				
◆	◆	Benz[a]anthracene	■		■		
	◆	Benz[j]aceanthrylene	■				
◆	◆	Benzene	■		■	■	
◆	◆	Benzo[b]fluoranthene	■		■		
	◆	Benzo[k]fluoranthene	■		■		
	◆	Benzo[b]furan	■				
◆	◆	Benzo[a]pyrene	■				
	◆	Benzo[c]phenanthrene	■				
◆	◆	Beryllium	■				
	◆	1,3-Butadiene	■	■		■	
◆	◆	Caffeic acid	■				
	◆	Carbon monoxide				■	
◆	◆	Catechol	■				
	◆	Chlorinated dioxins/furans	■			■	
◆	◆	Chromium	■	■		■	
◆	◆	Chrysene	■		■		
◆	◆	Cobalt	■		■	■	
◆		Coumarin (banned in food)					
◆	◆	Cresols (o-, m-, and p-cresol)	■	■			
◆	◆	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	■				
	◆	Ethylene oxide	■	■		■	
◆	◆	Formaldehyde	■	■			
	◆	Furan	■				
	◆	Glu-P-1 (2-Amino-6-methyldipyrido[1,2-a:3',2'-d]imidazole)	■				

### KEY

Chemicals have been linked to:

- CA** Cancer
- LD** Lung Disease
- HB** Heart and Blood Vessel Problems
- RP** Reproductive Problems
- AD** Addiction

**ND** Not Detected

◆ The information is not currently available

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

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.



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	◆	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)	■				
	◆	Isoprene	■				
◆	◆	Lead	■		■	■	
	◆	MeA-α-C (2-Amino-3-methyl)-9H-pyrido[2,3-b]indole)	■				
◆	◆	Mercury	■			■	
	◆	Methyl ethyl ketone		■			
◆	◆	5-Methylchrysene	■				
◆	◆	Naphthalene	■	■			
◆	◆	Nickel	■	■			
	◆	Nitrobenzene	■	■		■	
	◆	Nitromethane	■				
	◆	2-Nitropropane	■				
◆	◆	N-Nitrosodiethanolamine (NDELA)	■				
◆	◆	N-Nitrosodiethylamine (NDEA)	■				
◆	◆	N-Nitrosodimethylamine (NDMA)	■				
◆	◆	N-Nitrosomethylethylamine	■				
◆		N-Nitrosomorpholine (NMOR)	■				
◆	◆	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	■				
◆	◆	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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