



## Why are beer bottles brown?

The easy answer is to protect beer from light.

Only recently (in 2001) did we figure out how light causes the fault called light struck or skunked beer. Chemists at the University of North Carolina and Ghent University in Belgium found that when a beer has been exposed to light for a period of time, hop-derived molecules, called isohumulones, are degraded, forming a thiol called 3-methylbut-2-ene-1-thiol or just MBT for short.

The amazing thing about this compound is that we can smell it at concentrations as low as a few parts per billion. The perhaps not-so-amazing thing is that this compound gives beer a 'skunky' or 'cat urine' aroma and taste.

Obviously one would want to avoid this, and that's why beer is best in dark brown glass bottles that act as the beer's own sunglasses. Kegged beer of course will not go skunky (well, not until it's poured into a glass and served outside in bright sunlight - that will turn any beer skunky within minutes).

Brown bottles aid in protecting beer from being light-struck. Green or clear bottles provide little to no protection. The ubiquitous slice of lime served with a popular Mexican beer is nothing but clever marketing since it helps camouflage the smelly MBT formed because it is in clear glass! And it's been said that bottled beer can become light-struck in less than one minute in bright sun, after a few hours in diffuse daylight, and in a few days under normal fluorescent lighting.

English drinkers who had been huddled in the pub all winter found that their favourite beer developed a flavour they called "a touch of spring", due (we now know) to the fact that they were now drinking in the beer garden in full sun!

## How can I avoid skunked beers?

Simple, don't leave your beer exposed to light, and bottle in brown bottles which effectively screen the light. If you are drinking in full sun use smaller glasses more frequently, or get a German style stein with a lid!

We now have in stock new 500ml brown glass with flip top (grolsch style) seals.