Question: What makes the Beer Bottles brown and is it hazardous to the beer contents?

There are basically three colors of glass bottles used for beer, internationally.

Flint Glass (clear)
Amber (Various shades of brown)
Emerald Green (Various shades of dark Emerald green)
Coke green (Light green)

The most dangerous environmental aspects that can destroy the taste of beer are HEAT and LIGHT.

First, since the UV rays coming from sun reacts easily with the acid in beer when stored in clear bottles, manufacturers did a number of things.

Glass is principally Sand and a Flux which is Soda Ash and then other inorganic materials melted in a ceramic lined furnace to temperatures of 2,800 degrees F that help make it have the physical characteristics to be formed into objects such as containers.

For beer in Flint bottles, they put them in high boarded 6-pack carriers and shaded the bottles from the light, even in coolers to protect it from the UV light.

For Amber bottles, they use Sulfur and Carbon to give it the various shade of amber.

For Emerald green containers, the manufacturers uses a specific Chromic Oxide added to the raw material mixture.

For Coke green color they use Iron Oxide added to the raw materials.

Note: the more hops in the beer, the greater its tendency to react to the ultra-violet light.

All of these additives are there to protect the contents from the light. We just have to make sure that our beer containers are not subjected to any heat.

I hope that his addresses the question.