

The background of the entire image is a close-up photograph of two ears of yellow corn. The corn cobs are positioned diagonally, with the kernels appearing bright yellow and glossy. The husks are partially visible at the ends of the cobs. The lighting is bright, creating soft shadows and highlighting the texture of the corn.

Off flavours in beer

DMS

DIAMETHYL SULFIDE

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DMS DIMETHYL SULFIDE

TASTES / SMELLS LIKE

Perceived As:

- Sweetcorn, Creamed Corn, Cabbage, Canned/Cooked Vegetables, Oysters Sea Vegetables, Tomato Sauce

Approx. Flavor Threshold:

- 0.025mg/l

DMS DIMETHYL SULFIDE

GOOD, BAD OR OTHERWISE?

- Considered an off flavour in most beer, but can play some role in the flavour profile of some pale lagers, German and American pilsners, and cream ales.
- Likely will decrease with age.

DMS DIMETHYL SULFIDE

CAUSES

- DMS comes from a sulfur-based organic compound (S-methyl methionine, or SMM) produced when grain germinates during the malting process.
- Six row lager malts and Pilsner malts have the highest levels of this compound, as do some adjunct grains such as corn.
- SMM changes to DMS during the boil.
- It can also come from wild yeast or bacterial contamination during fermentation.

DMS DIMETHYL SULFIDE

CONTROL

- Reduce use of pilsner malts, lager malts, and corn adjuncts.
- Higher moisture content in malt increases the SMM, so make sure you store your malt in a dry, cool place.
- Over-sparging can increase DMS.
- DMS is a volatile compound and the easiest way to get rid of it is to drive it off with a vigorous boil. Always use a big enough kettle to allow for an energetic boil without having to worry about boil over. And always leave the lid off!

DMS DIMETHYL SULFIDE

CONTROL

- Ensure your vigorous boil is long enough. Boil for at least 60 minutes and, if using lager or pilsner malt, consider upping it to 90 minutes.
- Also try your best to crash cool your boiled wort as quickly as possible. DMS is produced at warm non-boiling temperatures, so you don't want to leave your wort in that temperature-range long.
- As always, practice good sanitation.