



Nuremberg, 02 June, 2020

GMO, Allergenic Substances and Vegan Declaration

We hereby confirm that all hops delivered by any member of the BarthHaas group of companies are neither genetically modified nor are the resulting hop products processed by using technology for genetically modified organisms (GMOs).

Therefore all hops and hop products do not have to be marked as GMO-products according to all existing regulations of European Union and other countries concerning food safety and also according to EU regulations 1829/2003 on genetically modified food and feed and 1830/2003 concerning the traceability and labelling of genetically modified organisms.

We also confirm that our hops and hop products are free from allergens, nor do they contain any allergenic potential. Therefore, according to EU regulation 1169/2011 our hops and hop products are not subject to compulsory allergen labelling.

We hereby certify that all hops and hop products produced by BarthHaas are free of animal products and/or by-products and have not been ionised or irradiated.

Should any change take place regarding the above, we will immediately inform all our customers.

BarthHaas GmbH & Co. KG

Dr. Reinhold Kugel
Head of Product Safety
and Quality Assurance





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Statement on Mycotoxins and Heavy Metals

Based on our analysis results we hereby state that no **mycotoxins** (Ochratoxine, Aflatoxines B1, B2, G1, G2) were detectable, neither in our hops nor in our hop products. These analyses are carried out on a regular basis.

The term “**heavy metals**” is not defined in the food laws and normally refers to a mixture of substances such as arsenic (As), lead (Pb), cadmium (Cd) and mercury (Hg), for the metals chromium (Cr), cobalt (Co), iron (Fe), molybdenum (Mo), and the metalloid selenium (Se).

There is no legal limit for the sum of the heavy metals. Relevant heavy metals, which are considered to be harmful metals, are those which have a definite toxic effect. These are lead, cadmium and mercury, also arsenic is a harmful metalloid and must be included in the evaluations. In this connection copper is not taken into account as it is considered as pesticide and the maximum residue for copper is regulated in EU regulation 396/2005.

Within our analysis programme we determine the contents of the following substances: arsenic (As), lead (Pb), cadmium (Cd), mercury (Hg), chromium (Cr), cobalt (Co), iron (Fe), molybdenum (Mo), nickel (Ni), and the metalloid selenium (Se).

We hereby state that the determined contents of the above mentioned metals in our hops and hop products are negligible. They do not have any negative impact on consumer health and beer quality as the resulting concentrations anticipated in beer are lower than the legal limits of the drinking water regulations.



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