

# Certificate of Analysis

**Product Name:** Type 90 Hop Pellets  
**Lot Number:** P92-ZLUPAL5210  
**Variety:** Palisade® Brand YCR 4 cv.  
**Crop Year:** 2016  
**Production Date:** December 2016  
**Best Use Before Date:** December 2019

<u>Characteristic</u>	<u>Typical Analysis</u>	<u>Actual Analysis</u>
Alpha Acids:	2.5 - 17.5% (w/w) LCV by EBC Analytica V 7.5	8.5%
Oil by Distillation:	Varies by Variety ASBC Hops - 13 (%v/w)	1.9%
Oil Profile by GC, EBC Analytica V 7.12:	B-Pinene: 0.7 %	Farnesene: 0.3 %
	Myrcene: 49.5 %	Humulene: 15.5 %
	Linalool: 0.4 %	Geraniol: 0.4 %
	Caryophyllene: 11.9 %	

Lead:	< 1.0 ppm	passes test
Arsenic:	< 0.5 ppm	passes test
Cadmium:	< 0.03 ppm	passes test
Total Heavy Metals:	< 10 ppm (asPb)	passes test

**Selected Brewing Ingredients BV**  
 Kraaiendonk 44  
 5428NZ Venhorst  
 Nederland