

# Sekret - Czarne chmiele

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **98**
- SRM **37.8**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **21.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **17.4 liter(s)**

## Steps

- Temp **66 C**, Time **70 min**

## Mash step by step

- Heat up **13 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (76.9%)	80 %	5
Grain	Weyermann - Dehusked Carafa III	0.5 kg (11%)	70 %	1024
Grain	Karmelowy Pszeniczny Strzegom	0.25 kg (5.5%)	79 %	130
Sugar	Sugar, Table (Sucrose)	0.2 kg (4.4%)	100 %	2
Grain	Strzegom pszenica prażona	0.1 kg (2.2%)	70 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	25 g	60 min	17 %
Boil	Chinook	20 g	20 min	13 %
Boil	Cascade	20 g	20 min	6 %
Boil	Amarillo	20 g	20 min	9.5 %
Dry Hop	Chinook	30 g	3 day(s)	13 %
Dry Hop	Amarillo	30 g	3 day(s)	9.5 %
Dry Hop	Cascade	30 g	3 day(s)	6 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale US-05	Ale	Dry	11 g	Fermentis