

## 61. Czarny Kormoran

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **60**
- SRM **35.4**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

- Temp **70 C**, Time **0 min**
- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **3 min**

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **70C**
- Keep mash **3 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	2 kg (33.9%)	79 %	22
Grain	Viking Pale Ale malt	3 kg (50.8%)	80 %	5
Grain	Słód Caramunich Typ II Weyermann	0.3 kg (5.1%)	73 %	120
Grain	Strzegom Czekoladowy 1200	0.3 kg (5.1%)	68 %	1202
Grain	Strzegom Barwiący	0.3 kg (5.1%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Boil	Mosaic	30 g	30 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis US-05	Ale	Dry	7 g	---

### Notes

- Uwarzone 13.03.2021r.

7 dni burzliwej w temperaturze około 18oC, następnie 7 dni cichej w temperaturze 16-18oC. Podczas fermentacji cichej chmielenie na zimno, na 5 i 3 dni przed końcem po 15 g chmielu Citra.  
*Aug 1, 2021, 4:02 PM*