

## czorne jak alabama v2

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **23**
- SRM **22.3**
- Style **Munich Dunkel**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **15.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **15.5 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **12.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (58.1%)	79 %	10
Grain	Caramunich® typ I	0.17 kg (4.9%)	73 %	80
Grain	Weyermann - Carapils	0.475 kg (13.8%)	78 %	4
Grain	red ale viking malt	0.4 kg (11.6%)	75 %	70
Grain	Żytni	0.2 kg (5.8%)	85 %	8
Grain	Weyermann - Chocolate Wheat	0.2 kg (5.8%)	74 %	788

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	12.6 %
Aroma (end of boil)	Tettnanger	10 g	5 min	2.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
novalager hybrid lager	Lager	Dry	11 g	---