

czorne jak alabama v2

- 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 | --- |