

## ale, ale

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **17**
- SRM **27.9**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **21.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **4.4 liter(s)**
- Total mash volume **5.8 liter(s)**

### Steps

- Temp **71 C**, Time **60 min**

### Mash step by step

- Heat up **4.4 liter(s)** of strike water to **79.4C**
- Add grains
- Keep mash **60 min** at **71C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **21.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Karmelowy żytni Strzegom	0.07 kg (1.9%)	75 %	150
Grain	słód pale ale	1 kg (25.9%)	85 %	4
Grain	Jęczmień palony	0.38 kg (9.9%)	55 %	985
Liquid Extract	Briess - Pale Ale Malt	1.2 kg (31.1%)	80 %	7
Liquid Extract	WES ekstrakt słodowy jasny	1.2 kg (31.1%)	80 %	15

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	cascade	15 g	40 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	7.19 g	Fermentis
Safale S-33	Ale	Dry	7.19 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Flavor	cukier kandyzowany	250 g	Boil	25 min