

## Extra special bitter

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **52**
- SRM **6.3**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.4 liter(s)**

### Steps

- Temp **63 C**, Time **45 min**
- Temp **73 C**, Time **15 min**

### Mash step by step

- Heat up **7.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **73C**
- Sparge using **7.5 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (76.9%)	70 %	5
Grain	Strzegom Monachijski typ II	0.5 kg (19.2%)	79 %	22
Grain	Strzegom Bursztynowy	0.1 kg (3.8%)	70 %	49

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	60 min	7 %
Boil	Bobek	15 g	5 min	5.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale