

Extra Strong Bitter

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **42**
- SRM **10**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **54 liter(s)**
- Trub loss **5 %**
- Size with trub loss **56.7 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **65.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **44.4 liter(s)**
- Total mash volume **59.2 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **44.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **35.6 liter(s)** of **76C** water or to achieve **65.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	10 kg (67.6%)	80 %	5
Grain	COOKIE Viking Malt	2.5 kg (16.9%)	72 %	40
Grain	Caramunich® typ I	1.8 kg (12.2%)	73 %	80
Grain	Płatki jęczmienne	0.25 kg (1.7%)	70 %	5
Grain	Płatki pszeniczne	0.25 kg (1.7%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	12.7 %
Boil	Puławski	90 g	60 min	7.6 %
Boil	Fuggles	30 g	20 min	5 %
Boil	Magnat	30 g	15 min	11.2 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	0 min	6.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	600 ml	---