

Symplex

- Gravity **14 BLG**
- ABV ---
- IBU **28**
- SRM **7.2**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.5 kg (90%)	85 %	7
Grain	Carahell	0.5 kg (10%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kazbek	30 g	5 min	4.7 %
Boil	Mandarina Bavaria	25 g	30 min	10 %
Aroma (end of boil)	Mandarina Bavaria	25 g	5 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Dry	11.5 g	Safale

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	2.5 g	Mash	15 min