1. Czas letni (Polish Summer Ale)

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **33**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **13 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **9.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg *(92.3%)*	85 %	7
Grain	Weyermann - Carapils	0.25 kg *(7.7%)*	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amora preta	20 g	60 min	9 %
Aroma (end of boil)	Amora preta	10 g	10 min	9 %
Whirlpool	Amora preta	30 g	0 min	9 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	1.5 g	Boil	10 min