

Summer ale "resztkowe"

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **23**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.9 liter(s)**
- Total mash volume **18.6 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.6 kg (77.4%)	80 %	4
Grain	Weyermann - Carapils	0.5 kg (10.8%)	78 %	4
Grain	Karmelowy Jasny 30EBC	0.25 kg (5.4%)	75 %	30
Grain	Monachijski	0.3 kg (6.5%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	12.09 %
Boil	Chinook	10 g	15 min	11.2 %
Boil	Chinook	5 g	10 min	11.2 %
Boil	Sybilla	10 g	5 min	4.1 %
Aroma (end of boil)	Sybilla	10 g	0 min	4.1 %
Dry Hop	Oktawia	50 g	7 day(s)	9.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

Extras

Type	Name	Amount	Use for	Time
Flavor	Suszone skórki cytryny	20 g	Boil	15 min
Spice	Pieprz	7 g	Boil	5 min
Fining	Mech irlandzki	3.5 g	Boil	15 min