

Dwójka

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **37**
- SRM **10.5**
- Style **American Pale Ale**

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 **8.5 liter(s)**
- Total mash volume **11.3 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **8.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.08 kg (73.5%)	80 %	4
Grain	Strzegom Wiedeński	0.6 kg (21.2%)	79 %	10
Grain	Strzegom Karmel 300	0.15 kg (5.3%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	7.5 g	20 min	4 %
Boil	Lublin (Lubelski)	7.5 g	5 min	4 %
Boil	Marynka	15 g	70 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	5 g	Fermentis