

Koliber

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **27**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **32.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **26.6 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (84.7%)	79 %	6
Grain	Carahell	0.5 kg (8.5%)	77 %	26
Grain	Weyermann - Carapils	0.25 kg (4.2%)	78 %	4
Grain	Rye, Flaked	0.15 kg (2.5%)	78.3 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	10 g	60 min	13.1 %
Boil	Equinox	15 g	20 min	13.1 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	10 g	Danstar

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	6 g	Boil	10 min