

AM

- Gravity **13.3 BLG**
- ABV ---
- IBU **28**
- SRM **6.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.2 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **16.6 liter(s)** of strike water to **60.9C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilżeński	4.5 kg (81.1%)	--- %	---
Grain	przeniczny	0.35 kg (6.3%)	--- %	---
Grain	Strzegom Karmel 300	0.2 kg (3.6%)	75 %	150
Grain	Strzegom Monachijski typ I	0.5 kg (9%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	10 g	60 min	10 %
Boil	Mosaic	10 g	30 min	10 %
Boil	Mosaic	20 g	15 min	10 %
Whirlpool	Mosaic	30 g	0 min	10 %
Dry Hop	Mosaic	30 g	5 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	---