

# paleale

- Gravity **14 BLG**
- ABV ---
- IBU **24**
- SRM **7**
- 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 **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **54 C**, Time **0 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **0 min** at **54C**
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (87.7%)	79 %	6
Grain	Strzegom Wiedeński	0.5 kg (8.8%)	79 %	4
Grain	Strzegom Karmel 150	0.2 kg (3.5%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	14 g	60 min	10 %
Boil	Comet	14 g	15 min	8.8 %
Boil	Simcoe	20 g	3 min	13.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Dry	12 g	Safale