

# American Pale Ale

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **5.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **27.9 liter(s)**

## Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **66 C**, Time **30 min**
- Temp **68 C**, Time **25 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **25 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (37.7%)	80 %	6
Grain	Strzegom Pilzneński	1 kg (18.9%)	80 %	4
Grain	Monachijski	1 kg (18.9%)	79 %	16
Grain	Strzegom Wiedeński	1 kg (18.9%)	79 %	10
Grain	Karmelowy Jasny 30EBC	0.3 kg (5.7%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	5 g	60 min	17 %
Boil	Apollo	10 g	30 min	17 %
Boil	Cascade	15 g	25 min	5.2 %
Boil	Cascade	15 g	15 min	5.2 %
Boil	Cascade	15 g	10 min	5.2 %
Aroma (end of boil)	Cascade	15 g	5 min	5.2 %
Aroma (end of boil)	Cascade PL	15 g	0 min	5.2 %
Dry Hop	Cascade	25 g	7 day(s)	6 %

Dry Hop	Summit	25 g	7 day(s)	17 %
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## Yeasts

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