

# American Pale Ale

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **50**
- SRM **6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **63 C**, Time **75 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **75 min** at **63C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (83.3%)	80 %	7
Grain	Briess - Bonlander Munich Malt	1 kg (16.7%)	78 %	20

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	25 g	50 min	15.5 %
Aroma (end of boil)	Centennial	25 g	5 min	10.5 %
Aroma (end of boil)	Citra	25 g	10 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Notes

- Fermentacja w temperaturze 19° C.  
Zacieranie w temperaturze 62°C - 63°C na wytranie.  
*May 26, 2017, 3:28 PM*