

# american india pale ale

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **44**
- SRM **7.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

## Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **22.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (67.6%)	80 %	7
Grain	Strzegom Wiedeński	1.7 kg (23%)	79 %	10
Grain	Caramunich® typ I	0.3 kg (4.1%)	73 %	80
Grain	Płatki owsiane	0.4 kg (5.4%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Boil	Ahtanum	40 g	15 min	5 %
Boil	Mandarina Bavaria	40 g	5 min	10 %
Dry Hop	Ahtanum	60 g	3 day(s)	5 %
Dry Hop	Mandarina Bavaria	60 g	3 day(s)	10 %

## Yeasts

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