

## German Ale #2

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **32**
- SRM **5.4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20.7 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.6 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (88.5%)	82 %	4
Grain	Strzegom Bursztynowy	0.5 kg (8.8%)	70 %	49
Grain	Pszeniczny	0.15 kg (2.7%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Perle	50 g	0 min	5.5 %
Aroma (end of boil)	Hallertau Mittelfruh	50 g	0 min	3 %
Dry Hop	Perle	50 g	2 day(s)	5.5 %
Dry Hop	Hallertau Mittlefruh	50 g	2 day(s)	3 %
Boil	Chinook	40 g	60 min	8.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale K-97	Ale	Dry	11.5 g	Fermentis