

# German IPA

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **17**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (90%)	80 %	5
Grain	Weyermann - Carapils	0.5 kg (10%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fantasia	30 g	60 min	4.2 %
Boil	Fantasia	10 g	5 min	4.2 %
Boil	Mittelfruh	20 g	5 min	4.7 %
Aroma (end of boil)	Fantasia	10 g	0 min	4.2 %
Aroma (end of boil)	Mittelfruh	10 g	0 min	4.7 %
Aroma (end of boil)	Hallertau Blanc	10 g	0 min	8.1 %
Dry Hop	Hallertau Blanc	20 g	5 day(s)	8.1 %
Dry Hop	Fantasia	10 g	5 day(s)	4.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis