

# German ale

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **23**
- SRM **3.9**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **3 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **21.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **19 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **15.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **21.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (52.6%)	80 %	5
Grain	Cara-Pils/Dextrine	1 kg (26.3%)	72 %	4
Grain	Briess - Wheat Malt, Red	0.6 kg (15.8%)	81 %	5
Grain	Monachijski	0.2 kg (5.3%)	80 %	15

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Aroma (end of boil)	Huell Melon	10 g	15 min	7.5 %
Aroma (end of boil)	Huell Melon	20 g	5 min	7.5 %

## Yeasts

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

## Notes

- 15 st  
*Jun 10, 2020, 12:22 PM*