

# Bolsch

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **26**
- SRM **3.2**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (87.5%)	81 %	4
Grain	Pszeniczny	0.5 kg (12.5%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Blanc	15 g	60 min	11 %
Boil	Hallertau Blanc	15 g	10 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11.5 g	Safbrew

## Notes

- Drożdże zadać w temp 17C, fermentacja 16-18C. Leżakowanie 3 miesiące w temp 0-8C.  
*Apr 11, 2020, 5:31 PM*