

## Kolsh drugie podejście

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **3.6**
- Style **Kölsch**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **36.8 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **73 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **60 min** at **63C**
- Keep mash **20 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **24.8 liter(s)** of **76C** water or to achieve **36.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg (66.7%)	82 %	4
Grain	Strzegom Pszeniczny	2 kg (33.3%)	81 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Summit	25 g	60 min	14.1 %
Boil	Summit	25 g	5 min	14.1 %
Aroma (end of boil)	Oktawia	50 g	0 min	8.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	6 g	Boil	20 min