

## #14 Kolsch

- Gravity **12.3 BLG**
- ABV ---
- IBU **37**
- SRM **5.1**
- 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 **79 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.3 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (82.4%)	80 %	4
Grain	Monachijski	0.5 kg (11.8%)	80 %	16
Grain	Strzegom Wiedeński	0.25 kg (5.9%)	79 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	22 g	60 min	10.8 %
Boil	Lublin (Lubelski)	30 g	15 min	4.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Slant	130 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	10 g	Boil	15 min