

# Kolsch dodatkowo chmielony

- Gravity **13.6 BLG**
- ABV ---
- IBU **20**
- SRM **8.9**
- 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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (60%)	80 %	4
Grain	Strzegom Monachijski typ II	2 kg (40%)	79 %	22

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	25 g	30 min	4 %
Boil	Lublin (Lubelski)	25 g	15 min	4 %
Boil	Cardinal	10 g	15 min	9.2 %
Dry Hop	Cardinal	25 g	7 day(s)	9.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis