

# chełmek kylsz

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **40**
- SRM **3.4**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.9 liter(s)**
- Total mash volume **15.3 liter(s)**

## Steps

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

## Mash step by step

- Heat up **11.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.1 kg (91.2%)	81 %	4
Grain	Pszeniczny	0.3 kg (8.8%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	10.6 %
Aroma (end of boil)	Hallertau Spalt Select	30 g	5 min	3.4 %
Whirlpool	Hallertau Spalt Select	30 g	20 min	3.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Kolsch	Ale	Liquid	100 ml	---