

chrumek kylsz

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **30**
- SRM **3.3**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **18.7 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 **14.5 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 **15.6 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.8 kg (91.6%)	81 %	4
Grain	Pszeniczny	0.35 kg (8.4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	22 g	60 min	9.8 %
Aroma (end of boil)	halertau mittelfruh	30 g	5 min	4.1 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	5 min	3.72 %

Yeasts

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