Kolsch

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **33**
- SRM **3.5**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **32 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **42.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **28.3 liter(s)** of **76C** water or to achieve **42.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6 kg *(85.7%)*	80 %	4
Grain	Strzegom Pszeniczny	1 kg *(14.3%)*	81 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	60 g	60 min	7 %
Boil	Tettnang	20 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Liquid	60 ml	Fermentum Mobile