

## #12 Prosty Jurli vol.2

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **25**
- SRM **3.4**
- Style **Kölsch**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.15 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15.8 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **12 liter(s)** of strike water to **57.1C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (92.1%)	81 %	4
Grain	Pszeniczny	0.25 kg (6.6%)	85 %	4
Grain	Sauermalz	0.05 kg (1.3%)	80 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	40 g	60 min	3.8 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	5 min	3.2 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	15 min	3.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Kolsch	Ale	Slant	150 ml	Wyeast Labs