

Kundel Ale

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **21**
- SRM **7**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **7 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

Steps

- Temp **67 C**, Time **666 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **666 min** at **67C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Vienna Malt	4.4 kg (81.5%)	80 %	5.5
Grain	Biscuit Malt	1 kg (18.5%)	79 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	14 g	50 min	10 %
Boil	Sybilla	20 g	10 min	4.1 %
Boil	Oktawia	20 g	10 min	9.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	5 g	Mash	60 min
Water Agent	kwas mlekowy 80%	1 g	Mash	666 min