

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 | kwask mlekowy 80% | 1 g | Mash | 666 min |