

Smoked Ella Pils

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **31**
- SRM **4.2**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **3 %**
- Size with trub loss **24.7 liter(s)**
- Boil time **65 min**
- Evaporation rate **7 %/h**
- Boil size **28.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **78 C**, Time **20 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **20 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---|---------------|-------|-----|
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 4 kg (61.5%) | 80 % | 4 |
| Grain | Weyermann - Smoked Malt | 0.5 kg (7.7%) | 81 % | 6 |
| Grain | Simpsons Best Pale Ale | 2 kg (30.8%) | 85 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Warrior | 10 g | 50 min | 16.3 % |
| Aroma (end of boil) | Ella (AUS) | 20 g | 10 min | 15.4 % |
| Whirlpool | Ella (AUS) | 30 g | 10 min | 15.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------|-------|-------|--------|------------|
| Kveik Oslo | Lager | Slant | 100 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|-----------|-----|------|--------|
| Fining | Protafloc | 2 g | Boil | 15 min |
|--------|-----------|-----|------|--------|