

Kolendra

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **15**
- SRM **3.8**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **11.8 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **63 C**, Time **70 min**

Mash step by step

- Heat up **11.8 liter(s)** of strike water to **68.8C**
- Add grains
- Keep mash **70 min** at **63C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **17.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 1.2 kg (37.5%) | 82 % | 4 |
| Grain | Viking Pale Ale malt | 2 kg (62.5%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Cascade | 10 g | 60 min | 5.5 % |
| Aroma (end of boil) | WAI-ITI | 20 g | 60 min | 1.6 % |
| Aroma (end of boil) | Relax | 5 g | 20 min | 1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------------------|--------|---------|-------|
| Spice | Kolendra | 14 g | Boil | 5 min |
| Spice | Skórka z 1/2 cytryny | 5 g | Boil | 5 min |