

# Hoppy rye apa II

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **31**
- SRM **3.9**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**

## Mash step by step

- Heat up **16.6 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1.5 kg (36.1%)  | 80 %  | 5   |
| Grain | Pilzneński           | 0.75 kg (18.1%) | 81 %  | 4   |
| Grain | Pszeniczny           | 1.2 kg (28.9%)  | 85 %  | 4   |
| Grain | Żytni                | 0.5 kg (12%)    | 85 %  | 8   |
| Grain | Carahell             | 0.2 kg (4.8%)   | 77 %  | 26  |

## Hops

| Use for | Name     | Amount | Time      | Alpha acid |
|---------|----------|--------|-----------|------------|
| Boil    | Magnat   | 25 g   | 50 min    | 11.2 %     |
| Dry Hop | Amarillo | 50 g   | 14 day(s) | 9.5 %      |
| Dry Hop | Equanot  | 50 g   | 14 day(s) | 12.5 %     |
| Dry Hop | Galaxy   | 50 g   | 14 day(s) | 16.5 %     |
| Dry Hop | Polaris  | 50 g   | 14 day(s) | 19.8 %     |

## Yeasts

| Name                         | Type | Form  | Amount | Laboratory |
|------------------------------|------|-------|--------|------------|
| WLP521 - Hornindal Kveik Ale | Ale  | Slant | 200 ml | ---        |