

Rye Ale

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **16**
- SRM **4.7**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **5 %**
- Size with trub loss **63 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **75.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **48 liter(s)**
- Total mash volume **64 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **48 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **43.9 liter(s)** of **76C** water or to achieve **75.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Viking Pilsner malt | 11 kg (68.8%) | 82 % | 4 |
| Grain | Rye Malt | 5 kg (31.3%) | 63 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-------------|--------|--------|------------|
| Boil | Centennial | 15 g | 60 min | 10.5 % |
| Boil | Centennial | 75 g | 10 min | 10.5 % |
| Whirlpool | Sorachi Ace | 90 g | 0 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| us05 | Ale | Dry | 35 g | --- |