

# RYE HAZY IPA 14 blg

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **58**
- SRM **7.4**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **2 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.65 liter(s) / kg**
- Mash size **23.9 liter(s)**
- Total mash volume **30.5 liter(s)**

## Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **77 C**, Time **20 min**

## Mash step by step

- Heat up **23.9 liter(s)** of strike water to **67.8C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **20 min** at **77C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **24.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield  | EBC |
|-------|----------------------|-----------------|--------|-----|
| Grain | Viking Pale Ale malt | 3 kg (45.8%)    | 80 %   | 6   |
| Grain | Rye Malt             | 2 kg (30.5%)    | 63 %   | 10  |
| Grain | Viking Munich Malt   | 0.75 kg (11.5%) | 78 %   | 28  |
| Grain | Viking Vienna Malt   | 0.75 kg (11.5%) | 79 %   | 12  |
| Grain | Acid Malt            | 0.05 kg (0.8%)  | 58.7 % | 6   |

## Hops

| Use for   | Name       | Amount | Time   | Alpha acid |
|-----------|------------|--------|--------|------------|
| Boil      | Warrior    | 20 g   | 60 min | 15.5 %     |
| Boil      | Chinook    | 20 g   | 20 min | 9 %        |
| Boil      | Cascade PL | 20 g   | 20 min | 5.2 %      |
| Whirlpool | Cascade PL | 20 g   | 20 min | 5.2 %      |
| Whirlpool | Chinook    | 20 g   | 20 min | 9 %        |

## Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale  | Slant | 150 ml | FERMENTIS  |

## Notes

- Hop Stand w temperaturze 74C - 70C przez 20 minut  
*Jul 18, 2020, 11:06 AM*