

# BlackColdRyeIPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **76**
- SRM **32.1**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **10.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **11.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **2.4 liter(s)** of **76C** water or to achieve **10.8 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC  |
|-------|----------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 2 kg (71.4%)   | 80 %  | 5    |
| Grain | Viking Melanoidynowy | 0.2 kg (7.1%)  | 75 %  | 60   |
| Grain | Żytni                | 0.4 kg (14.3%) | 85 %  | 8    |
| Grain | Strzegom Barwiący    | 0.2 kg (7.1%)  | 68 %  | 1300 |

## Hops

| Use for   | Name       | Amount | Time     | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil      | Marynka    | 18 g   | 30 min   | 10 %       |
| Whirlpool | Centennial | 16 g   | 30 min   | 10.5 %     |
| Whirlpool | Citra      | 16 g   | 30 min   | 12 %       |
| Whirlpool | Chinook    | 16 g   | 30 min   | 13 %       |
| Dry Hop   | Centennial | 24 g   | 5 day(s) | 10.5 %     |
| Dry Hop   | Citra      | 24 g   | 5 day(s) | 12 %       |
| Dry Hop   | Chinook    | 24 g   | 5 day(s) | 13 %       |

## Yeasts

| Name      | Type  | Form  | Amount | Laboratory |
|-----------|-------|-------|--------|------------|
| Novalager | Lager | Slant | 500 ml | Lelelland  |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g    | Boil    | 10 min |