

# Forest Rye IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **70**
- SRM **15.4**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **66 C**, Time **30 min**
- Temp **68 C**, Time **15 min**
- Temp **74 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **68C**
- Keep mash **15 min** at **74C**
- Keep mash **5 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale        | 4.5 kg (69.2%) | 79 %  | 6   |
| Grain | Żytmi                    | 1.5 kg (23.1%) | 85 %  | 8   |
| Grain | Strzegom Czekoladowy 400 | 0.5 kg (7.7%)  | 68 %  | 400 |

## Hops

| Use for | Name    | Amount | Time     | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil    | Chinook | 40 g   | 60 min   | 13 %       |
| Boil    | chinook | 10 g   | 40 min   | 9.5 %      |
| Boil    | Citra   | 25 g   | 10 min   | 12 %       |
| Boil    | Citra   | 25 g   | 5 min    | 12 %       |
| Dry Hop | Citra   | 100 g  | 3 day(s) | 12 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 23 g   | Fermentis  |

## Extras

| Type | Name                 | Amount | Use for | Time   |
|------|----------------------|--------|---------|--------|
| Herb | pędy sosny i świerku | 140 g  | Boil    | 15 min |