

## #75 Smoky Rye IPA

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **40**
- SRM **4.6**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **16.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount        | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt   | 3 kg (55.6%)  | 80 %  | 5   |
| Grain | Słód Wędzony Steinbach | 1 kg (18.5%)  | 80 %  | 5   |
| Grain | Żytni                  | 1 kg (18.5%)  | 85 %  | 8   |
| Grain | Płatki owsiane         | 0.4 kg (7.4%) | 60 %  | 3   |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Amarillo | 30 g   | 60 min   | 9.5 %      |
| Boil                | Amarillo | 30 g   | 10 min   | 9.5 %      |
| Aroma (end of boil) | Amarillo | 40 g   | 0 min    | 9.5 %      |
| Dry Hop             | Amarillo | 100 g  | 5 day(s) | 9.5 %      |

### Yeasts

| Name                 | Type | Form  | Amount | Laboratory       |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Slant | 120 ml | Fermentum Mobile |