

## żytnia sesyjna IPA

- Gravity **12.1 BLG**
- ABV ---
- IBU **33**
- SRM **4.4**
- Style **Rye IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **26.9 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **21.2 liter(s)**
- Total mash volume **26.5 liter(s)**

### Steps

- Temp **67 C**, Time **50 min**

### Mash step by step

- Heat up **21.2 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **50 min** at **67C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Weyermann - Pilsner Malt    | 4 kg (75.5%)  | 81 %  | 5   |
| Grain | Weyermann - Rye Malt        | 1 kg (18.9%)  | 85 %  | 7   |
| Grain | Weyermann - Acidulated Malt | 0.3 kg (5.7%) | 80 %  | 6   |

### Hops

| Use for             | Name   | Amount | Time     | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Aroma (end of boil) | Summer | 30 g   | 60 min   | 6.4 %      |
| Aroma (end of boil) | Summer | 30 g   | 20 min   | 6.4 %      |
| Whirlpool           | Summer | 40 g   | 0 min    | 6.4 %      |
| Dry Hop             | Summer | 100 g  | 3 day(s) | 6.4 %      |

### Yeasts

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