

żytnia ipa

- Gravity **14 BLG**
- ABV ---
- IBU **52**
- SRM **9.8**
- 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 **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.6 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **70 C**, Time **10 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **69.3C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **70C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Żytni | 1.5 kg (28.4%) | 85 % | 8 |
| Grain | Pilzneński | 3.5 kg (66.2%) | 81 % | 4 |
| Grain | Weyermann - Carared | 0.22 kg (4.2%) | 75 % | 45 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.05 kg (0.9%) | 73 % | 1001 |
| Grain | Carafa II | 0.02 kg (0.4%) | 70 % | 812 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil | Vic Secret | 20 g | 60 min | 16.3 % |
| Boil | Jarrylo | 20 g | 15 min | 15 % |
| Whirlpool | Jarrylo | 20 g | 0 min | 15 % |
| Dry Hop | Jarrylo | 40 g | 7 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |