

ryzowe

- Gravity **13.6 BLG**
- ABV ---
- IBU **32**
- SRM **6.4**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

Steps

- Temp **55 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **68 C**, Time **30 min**

Mash step by step

- Heat up **7.5 liter(s)** of strike water to **60.9C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **68C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|--------|-----|
| Grain | Rye, Flaked | 0.25 kg (10%) | 78.3 % | 4 |
| Grain | Strzegom Pilzneński | 1.65 kg (65.7%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.61 kg (24.3%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | WAI-ITI | 10 g | 30 min | 2.8 % |
| Boil | Cascade | 12 g | 30 min | 7.7 % |
| Mash | Chinook | 10 g | 30 min | 13 % |
| Aroma (end of boil) | WAI-ITI | 10 g | 5 min | 2.8 % |
| Aroma (end of boil) | Cascade | 10 g | 5 min | 7.7 % |
| Aroma (end of boil) | Chinook | 10 g | 5 min | 13 % |
| Dry Hop | WAI-ITI | 15 g | 4 day(s) | 2.8 % |
| Dry Hop | Cascade | 15 g | 4 day(s) | 7.7 % |
| Dry Hop | Chinook | 15 g | 4 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|-------------|-------------|---------------|-------------------|
| Fermentis US-05 | Ale | Dry | 5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|---------------|----------------|-------------|
| Flavor | trawa cytrynowa | 10 g | Boil | 5 min |