

Probusowe

- Gravity **10.1 BLG**
- ABV ---
- IBU **10**
- SRM **20.8**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **14.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.2 liter(s)**
- Boil time **45 min**
- Evaporation rate **10 %/h**
- Boil size **16.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **7.7 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **21.4 liter(s)**

Steps

- Temp **45 C**, Time **20 min**
- Temp **50 C**, Time **30 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **50 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **46.6C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **30 min** at **50C**
- Keep mash **40 min** at **62C**
- Keep mash **50 min** at **72C**
- Sparge using **-0.1 liter(s)** of **76C** water or to achieve **16.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale | 1 kg (40.7%) | 79 % | 6 |
| Grain | Pilzneński | 1 kg (40.7%) | 81 % | 4 |
| Grain | Pszeniczny | 0.1 kg (4.1%) | 80 % | 4 |
| Grain | Żytni | 0.3 kg (12.2%) | 85 % | 190 |
| Grain | Strzegom Czekoladowy ciemny | 0.06 kg (2.4%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Challenger | 6 g | 0 min | 8.3 % |
| Boil | Challenger | 6 g | 30 min | 8.3 % |
| Boil | Fuggles | 5 g | 30 min | 4.9 % |
| Dry Hop | Fuggles | 4 g | 5 day(s) | 4.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|----------------------|-----|-----|------|---------|
| Danstar - Nottingham | Ale | Dry | 11 g | Danstar |
|----------------------|-----|-----|------|---------|