

robust porter z resztek

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **32**
- SRM **34**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **34.6 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **20.9 liter(s)**
- Total mash volume **31.3 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 7 kg (67.1%) | 79 % | 6 |
| Grain | Strzegom Pilzneński | 0.5 kg (4.8%) | 80 % | 4 |
| Grain | Strzegom Czekoladowy jasny | 0.75 kg (7.2%) | 68 % | 400 |
| Grain | Biscuit Malt | 0.38 kg (3.6%) | 79 % | 45 |
| Grain | Jęczmień palony | 0.5 kg (4.8%) | 55 % | 985 |
| Grain | Caramel/Crystal Malt - 60L | 0.3 kg (2.9%) | 75 % | 20 |
| Grain | Płatki owsiane | 1 kg (9.6%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Marynka | 75 g | 30 min | 7.3 % |
| Aroma (end of boil) | Lublin (Lubelski) | 50 g | 0 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 200 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------|---------|--------|-----------|----------|
| Spice | vanilla | 4 g | Secondary | 7 day(s) |