

Robust porter

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **36**
- SRM **26.7**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Monachijski typ II | 3.5 kg (53.8%) | 79 % | 22 |
| Grain | Viking Pale Ale malt | 2.1 kg (32.3%) | 80 % | 5 |
| Grain | Strzegom Czekoladowy 400 | 0.4 kg (6.2%) | 68 % | 400 |
| Grain | Strzegom Karmel 300 | 0.15 kg (2.3%) | 70 % | 299 |
| Grain | Strzegom Karmel 600 | 0.15 kg (2.3%) | 68 % | 601 |
| Grain | Strzegom Pszeniczny | 0.1 kg (1.5%) | 81 % | 6 |
| Grain | Strzegom pszenica prażona | 0.1 kg (1.5%) | 70 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 8.8 % |
| Boil | Perle | 30 g | 15 min | 7 % |
| Aroma (end of boil) | Perle | 30 g | 0 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 111 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------|--------|---------|-------|
| Flavor | kakao | 400 g | Boil | 5 min |