

Robust porter

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **35**
- SRM **31.5**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4.5 kg (78.3%) | 80 % | 5 |
| Grain | Carabohemian | 0.4 kg (7%) | 70 % | 200 |
| Grain | Weyermann Caramunich 3 | 0.4 kg (7%) | 76 % | 150 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.3 kg (5.2%) | 73 % | 1001 |
| Grain | Weyermann - Carafa III Special | 0.15 kg (2.6%) | 70 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | Centennial | 30 g | 60 min | 10.5 % |
| Boil | Willamette | 15 g | 15 min | 5 % |
| Aroma (end of boil) | East Kent Goldings | 20 g | 0 min | 5.1 % |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Fining | whirfloc | 1.25 g | Boil | 15 min |