

Robust porter marxam

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **36**
- SRM **32.3**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pilsner malt | 5.2 kg (83.9%) | 82 % | 4 |
| Grain | Czekoladowy | 0.4 kg (6.5%) | 60 % | 788 |
| Grain | Strzegom Karmel 300 | 0.4 kg (6.5%) | 70 % | 299 |
| Grain | Barwiący | 0.1 kg (1.6%) | 55 % | 985 |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (1.6%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.5 % |
| Boil | Chinook | 5 g | 15 min | 13 % |
| Boil | Citra | 5 g | 15 min | 12 % |
| Aroma (end of boil) | Amarillo | 10 g | 0 min | 9.5 % |
| Aroma (end of boil) | Chinook | 5 g | 0 min | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|-------|--------|------------|
| US05 | Ale | Slant | 500 ml | --- |