

GrAS

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **45**
- SRM **44.6**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **16.9 liter(s)**

Mash information

- Mash efficiency **58 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.7 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 2 kg (38.6%) | 85 % | 7 |
| Grain | Cookie | 1 kg (19.3%) | 80 % | 70 |
| Grain | Pszeniczny | 0.5 kg (9.7%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.53 kg (10.2%) | 60 % | 3 |
| Grain | Carahell | 0.5 kg (9.7%) | 77 % | 26 |
| Grain | Karmelowy żytni Strzegom | 0.2 kg (3.9%) | 75 % | 150 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (3.9%) | 68 % | 1200 |
| Grain | Weyermann - Carafa III | 0.25 kg (4.8%) | 70 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Simcoe | 30 g | 30 min | 13.2 % |