

Extra Stout

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **30**
- SRM **35.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 6 kg (73.2%) | 80 % | 4 |
| Grain | Abbey Malt Weyermann | 0.6 kg (7.3%) | 75 % | 45 |
| Grain | Czekoladowy | 0.6 kg (7.3%) | 60 % | 788 |
| Grain | Jęczmień palony | 0.4 kg (4.9%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.6 kg (7.3%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 50 g | 60 min | 5.7 % |
| Boil | Willamette | 30 g | 15 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 40 ml | Fermentum Mobile |