

Fes v3

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **21**
- SRM **32.5**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.2 liter(s)**
- Total mash volume **45.6 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|---------------|-------|------|
| Grain | Pale Malt (2 Row) UK | 8 kg (70.2%) | 78 % | 6 |
| Grain | Strzegom Wiedeński | 1 kg (8.8%) | 79 % | 10 |
| Grain | Swean BLACK | 0.4 kg (3.5%) | 55 % | 1250 |
| Grain | Żytni | 1 kg (8.8%) | 85 % | 8 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 1 kg (8.8%) | 73 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 50 g | 60 min | 4 % |
| Boil | Perle | 60 g | 10 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 100 ml | Fermentum Mobile |