

FES

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **40**
- SRM **36.5**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale | 3.4 kg (56.7%) | 79 % | 6 |
| Grain | Jęczmień niesłodowany | 0.8 kg (13.3%) | 75 % | 3 |
| Grain | caramunich III | 0.5 kg (8.3%) | --- % | 150 |
| Grain | Carawheat (GR) | 0.5 kg (8.3%) | 68 % | 120 |
| Grain | Kawowy CastleMalting | 0.5 kg (8.3%) | 71 % | 500 |
| Grain | Chocolate Thomas Fawcett | 0.3 kg (5%) | --- % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 35 g | 60 min | 11.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-04 | Ale | Dry | 15 g | --- |