

FES

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **41**
- SRM **53**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|---------------|-------|------|
| Grain | Strzegom Pale Ale | 5 kg (61%) | 79 % | 6 |
| Grain | Płatki owsiane | 1.8 kg (22%) | 65 % | 3 |
| Grain | Czekoladowy | 0.5 kg (6.1%) | 60 % | 800 |
| Grain | Carafa III | 0.4 kg (4.9%) | 70 % | 1000 |
| Grain | Jęczmień palony | 0.5 kg (6.1%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Warrior | 30 g | 60 min | 15.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-------|--------|-----------|------|
| Other | Tonka | 10 g | Secondary | --- |