

Smoked FES

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **35**
- SRM **30.4**
- 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 **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 2 kg (30.3%) | 80 % | 5 |
| Grain | Wędzony bukiem Viking Malt | 3.5 kg (53%) | 82 % | 10 |
| Grain | Caraaroma | 0.3 kg (4.5%) | 78 % | 400 |
| Grain | Weyermann - Carafa II | 0.2 kg (3%) | 70 % | 1100 |
| Grain | Jęczmień palony | 0.2 kg (3%) | 55 % | 1000 |
| Grain | Płatki jęczmienne | 0.4 kg (6.1%) | 1 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Challenger | 30 g | 60 min | 5.8 % |
| Boil | Challenger | 40 g | 30 min | 5.8 % |
| Aroma (end of boil) | Challenger | 30 g | 1 min | 5.8 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | Whirlfloc | 6.25 g | Boil | 15 min |