

## HB foreign extra stout 16.8

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **36**
- SRM **30.9**
- 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 **85 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **23.4 liter(s)**

### Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **16.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount        | Yield | EBC |
|-------|---------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt      | 5 kg (76.9%)  | 80 %  | 5   |
| Grain | Viking Munich Malt        | 0.5 kg (7.7%) | 78 %  | 18  |
| Grain | płatki jęczmienne         | 0.4 kg (6.2%) | 60 %  | 4   |
| Grain | Viking Czekoladowy ciemny | 0.3 kg (4.6%) | 67 %  | 900 |
| Grain | Jęczmień palony           | 0.3 kg (4.6%) | 55 %  | 985 |

### Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | Challenger         | 50 g   | 60 min | 7 %        |
| Aroma (end of boil) | East Kent Goldings | 50 g   | 5 min  | 5.1 %      |

### Yeasts

| Name                  | Type | Form  | Amount | Laboratory       |
|-----------------------|------|-------|--------|------------------|
| FM11 Wichrowe Wzgórza | Ale  | Slant | 400 ml | Fermentum Mobile |

### Notes

- Słody palone i Czekoladowy na kobiec zacierania.  
*Dec 29, 2023, 6:31 PM*