

Foregin Extra Stout Oak Aged

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **58**
- SRM **41.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **75 min**
- Evaporation rate **20 %/h**
- Boil size **16.8 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.5 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|-----------------|-------|------|
| Grain | Strzegom Pale Ale | 3.4 kg (76.8%) | 79 % | 6 |
| Grain | Barley, Flaked | 0.4 kg (9%) | 70 % | 4 |
| Grain | Strzegom Karmel 600 | 0.25 kg (5.6%) | 68 % | 600 |
| Grain | Strzegom pszenica prażona | 0.25 kg (5.6%) | 1 % | 1000 |
| Grain | Jęczmień palony | 0.125 kg (2.8%) | 1 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Challenger | 30 g | 60 min | 7 % |
| Boil | Perle | 30 g | 30 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| US-05 | Ale | Slant | 60 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------------|----------------------|------|-----------|-----------|
| Water Agent | Kreda | 2 g | Mash | 60 min |
| Flavor | Płatki dębowe whisky | 25 g | Secondary | 21 day(s) |