

# Wędzony FES

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **58**
- SRM **56.6**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.6 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield  | EBC  |
|-------|----------------------------------|----------------|--------|------|
| Grain | Weyermann Wędzony bukiem         | 3 kg (64.5%)   | 82 %   | 10   |
| Grain | Słód owsiany                     | 0.5 kg (10.8%) | 61 %   | 5    |
| Grain | Special B Malt                   | 0.3 kg (6.5%)  | 65.2 % | 315  |
| Grain | Caraaroma                        | 0.1 kg (2.2%)  | 78 %   | 400  |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.25 kg (5.4%) | 73 %   | 1200 |
| Grain | Carafa                           | 0.2 kg (4.3%)  | 70 %   | 664  |
| Grain | Viking Czekoladowy ciemny        | 0.2 kg (4.3%)  | 67 %   | 900  |
| Grain | Jęczmień palony                  | 0.1 kg (2.2%)  | 55 %   | 985  |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 34 g   | 60 min | 11.5 %     |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                          |     |       |        |            |
|--------------------------|-----|-------|--------|------------|
| WLP004 - Irish Ale Yeast | Ale | Slant | 100 ml | White Labs |
|--------------------------|-----|-------|--------|------------|

## Notes

- Słody ciemne dodane w połowie drugiej przerwy 72 stopnie.  
*Jul 28, 2022, 6:06 PM*