

## PLUMMY SMOKED PORTER 16-5

- Gravity **22 BLG**
- ABV ---
- IBU **37**
- SRM **48**
- Style **Robust Porter**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 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)**

### Steps

- Temp **52 C**, Time **20 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **19.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński         | 4.5 kg (68.2%) | 80 %  | 4    |
| Grain | Caraaroma                   | 0.2 kg (3%)    | 78 %  | 400  |
| Grain | Peat Smoked Malt            | 1 kg (15.2%)   | 74 %  | 6    |
| Grain | Simpsons - Crystal Dark     | 0.3 kg (4.5%)  | 74 %  | 158  |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (4.5%)  | 68 %  | 1200 |
| Grain | Płatki owsiane              | 0.3 kg (4.5%)  | 85 %  | 3    |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Fuggles | 40 g   | 60 min | 4.5 %      |
| Boil    | Fuggles | 30 g   | 30 min | 4.5 %      |
| Boil    | Fuggles | 30 g   | 15 min | 4.5 %      |

### Yeasts

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

|             |     |       |        |        |
|-------------|-----|-------|--------|--------|
| Safale S-04 | Ale | Slant | 200 ml | Safale |
|-------------|-----|-------|--------|--------|

### Extras

| Type   | Name                 | Amount | Use for   | Time      |
|--------|----------------------|--------|-----------|-----------|
| Flavor | Płatki dębowe        | 25 g   | Secondary | 14 day(s) |
| Flavor | Śliwki wędzone dymem | 300 g  | Boil      | 10 min    |
| Flavor | Śliwki wędzone dymem | 300 g  | Secondary | 4 day(s)  |