

## 32A. Classic Style Smoked Beer Smoked Dark Lager

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **20**
- SRM **19.2**
- Style **Munich Dunkel**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **3 %**
- Size with trub loss **17.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **19.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.44 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18.4 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **5 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **72C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount          | Yield | EBC  |
|-------|-----------------------------|-----------------|-------|------|
| Grain | Weyermann - Smoked Malt     | 1.07 kg (31.7%) | 81 %  | 6    |
| Grain | Strzegom Wiedeński          | 1.07 kg (31.7%) | 79 %  | 10   |
| Grain | Strzegom Monachijski typ I  | 1.07 kg (31.7%) | 79 %  | 16   |
| Grain | Strzegom Czekoladowy ciemny | 0.17 kg (5%)    | 68 %  | 1200 |

### Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Saaz (Czech Republic) | 20 g   | 60 min | 4.5 %      |
| Aroma (end of boil) | Saaz (Czech Republic) | 20 g   | 15 min | 4.5 %      |

### Yeasts

| Name          | Type  | Form  | Amount | Laboratory |
|---------------|-------|-------|--------|------------|
| OYL-071 Lutra | Lager | Slant | 100 ml | ---        |

### Extras

| Type        | Name  | Amount | Use for | Time   |
|-------------|-------|--------|---------|--------|
| Water Agent | CaCO3 | 4 g    | Boil    | 60 min |

### Notes

- 7-10 dni 22C  
14-21 dni 2C  
*Nov 3, 2021, 7:58 PM*