

## Przeniczne ciemne 13 BLG

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **20**
- SRM **10.3**
- Style **Dunkelweizen**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **18.2 liter(s)**

### Steps

- Temp **45 C**, Time **10 min**
- Temp **53 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **14.2 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

### Fermentables

| Type  | Name                            | Amount         | Yield | EBC  |
|-------|---------------------------------|----------------|-------|------|
| Grain | Słód pszeniczny jasny Weyermann | 1.9 kg (46.9%) | 82 %  | 5    |
| Grain | Słód pilznieński Weyermann      | 1.3 kg (32.1%) | 81 %  | 5    |
| Grain | Strzegom Monachijski typ II     | 0.6 kg (14.8%) | 79 %  | 25   |
| Grain | Weyermann - Carawheat           | 0.2 kg (4.9%)  | 77 %  | 130  |
| Grain | Czekoladowy                     | 0.05 kg (1.2%) | 60 %  | 1200 |

### Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | Comet | 10 g   | 70 min | 8.3 %      |
| Boil    | Comet | 10 g   | 30 min | 8.3 %      |
| Boil    | Comet | 10 g   | 5 min  | 8.3 %      |

### Yeasts

| Name  | Type  | Form | Amount | Laboratory |
|-------|-------|------|--------|------------|
| wb-06 | Wheat | Dry  | 11.5 g | Safale     |