

# Dunkelweizen #1

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **19**
- SRM **22.8**
- Style **Dunkelweizen**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **12 %/h**
- Boil size **29.3 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **21.4 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **45 C**, Time **20 min**
- Temp **63 C**, Time **40 min**
- Temp **73 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **21.4 liter(s)** of strike water to **48.9C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **73C**
- Keep mash **1 min** at **78C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Pszoniczny                  | 2.2 kg (32.8%) | 85 %  | 4    |
| Grain | Strzegom Monachijski typ I  | 1 kg (14.9%)   | 79 %  | 16   |
| Grain | Strzegom Monachijski typ II | 1 kg (14.9%)   | 79 %  | 22   |
| Grain | Strzegom Wiedeński          | 2 kg (29.9%)   | 79 %  | 10   |
| Grain | Strzegom Czekoladowy jasny  | 0.2 kg (3%)    | 68 %  | 400  |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (3%)    | 68 %  | 900  |
| Grain | Strzegom pszenica prażona   | 0.1 kg (1.5%)  | 70 %  | 1000 |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 20 g   | 60 min | 9.6 %      |

## Yeasts

| Name          | Type | Form  | Amount | Laboratory |
|---------------|------|-------|--------|------------|
| Safbrew WB-06 | Ale  | Slant | 500 ml | ---        |