

# Dunkelweizen #1 - Browar na Wyżynie

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **15**
- SRM **14.9**
- Style **Dunkelweizen**

## Batch size

- Expected quantity of finished beer **18.5 liter(s)**
- Trub loss **6 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **11 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

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

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

| Type  | Name                                | Amount         | Yield | EBC  |
|-------|-------------------------------------|----------------|-------|------|
| Grain | pszeniczny Viking Malt              | 2.5 kg (52.1%) | 81 %  | 5    |
| Grain | monachijski typ II Viking Malt      | 1.5 kg (31.3%) | 78 %  | 24   |
| Grain | red ale (melanoidynowy) Viking Malt | 0.5 kg (10.4%) | 75 %  | 80   |
| Grain | pszeniczny karmelowy Viking Malt    | 0.25 kg (5.2%) | 70 %  | 100  |
| Grain | czekoladowy ciemny Viking Malt      | 0.05 kg (1%)   | 1 %   | 1200 |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Perle (DE) - granulat | 15 g   | 60 min | 8 %        |

## Yeasts

| Name                             | Type | Form | Amount | Laboratory |
|----------------------------------|------|------|--------|------------|
| Lallemand Danstar Munich Classic | Ale  | Dry  | 11 g   | ---        |

## Extras

| Type        | Name                  | Amount  | Use for | Time   |
|-------------|-----------------------|---------|---------|--------|
| Water Agent | kwas mlekowy 80%      | 5 g     | Mash    | 70 min |
| Water Agent | chlorek sodu          | 4 g     | Mash    | 70 min |
| Water Agent | siarczan wapnia       | 1 g     | Mash    | 70 min |
| Water Agent | woda demineralizowana | 15000 g | Mash    | 70 min |

## Notes

- Blend wody 50% demineralizowana 50% kranówka

Profil wody:

Ca+2 Mg+2 Na+ Cl- SO4-2 Alkalinity Residual

68.3 10.0 45.1 72.5 38.9 94.9 40.4

SO42-/Cl- ratio: 0.5 Very Malty

Feb 2, 2018, 10:19 AM