

Dunkelweizen

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **20**
- SRM **13.2**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **77.5 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **42 C**, Time **30 min**
- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **44.8C**
- Add grains
- Keep mash **30 min** at **42C**
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Viking Wheat Malt | 2.5 kg (54.9%) | 83 % | 5 |
| Grain | Viking Munich Light Malt | 1.5 kg (33%) | 78 % | 16 |
| Grain | Viking Caramel 150 Malt | 0.4 kg (8.8%) | 74 % | 150 |
| Grain | Viking Caramel 600 Malt | 0.15 kg (3.3%) | 68 % | 600 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------------|--------|--------|------------|
| Boil | Magnum PL 2022 | 14 g | 60 min | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|-------|--------|------------|
| WHC Lab Banana Split | Wheat | Slant | 135 ml | WHC Lab |

Extras

| Type | Name | Amount | Use for | Time |
|-------|--------------|--------|---------|------|
| Other | Łuska Ryżowa | 50 g | Mash | --- |