

Banach-Tarski paradox - Dunkelweizen v.2.1

- Gravity **12.9 BLG**
- ABV ---
- IBU **16**
- SRM **21.3**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **60 min** at **65C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Strzegom Pszeniczny | 3 kg (63.8%) | 81 % | 6 |
| Grain | Strzegom Karmel 150 | 1.2 kg (25.5%) | 75 % | 150 |
| Grain | Strzegom Pilzneński | 0.5 kg (10.6%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Hallertau | 30 g | 60 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|-------|--------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 30 ml | Fermentum Mobile |