

Munich Dunkel - Piwoszarnia.pl

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **30**
- SRM **12.1**
- Style **Munich Dunkel**

Batch size

- Expected quantity of finished beer **8.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.9 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **10.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **11.3 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **56C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **67C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **3.6 liter(s)** of **76C** water or to achieve **10.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|-----------------|-------|-----|
| Grain | Viking Pilsner malt | 1 kg (44.4%) | 82 % | 4 |
| Grain | Viking Munich Malt | 1 kg (44.4%) | 78 % | 18 |
| Grain | Karmelowy Jasny 30EBC | 0.125 kg (5.6%) | 75 % | 30 |
| Grain | Strzegom Karmel 300 | 0.125 kg (5.6%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 13 g | 30 min | 10 % |
| Boil | Lublin (Lubelski) | 13 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------|------|-------|--------|------------|
| Voss Kveik gęstwa | Ale | Slant | 300 ml | --- |