

5. Bawarka

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **24**
- SRM **20.3**
- Style **Munich Dunkel**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **17.1 liter(s)**

Steps

- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **45 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **72C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	3 kg (61.2%)	79 %	16
Grain	Strzegom Monachijski typ II	1.5 kg (30.6%)	79 %	22
Grain	Viking Melanoidynowy	0.25 kg (5.1%)	75 %	60
Grain	Carafa III	0.15 kg (3.1%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Mittelfruh	40 g	60 min	3.8 %
Aroma (end of boil)	Hallertau Mittelfruh	20 g	10 min	3.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Diamond Lager	Lager	Dry	11 g	Lallemand