Dark Lager

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **27**
- SRM **19.8**
- Style **Dark American Lager**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **28.3 liter(s)**
- Total mash volume **36.4 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **55 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **28.3 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **55 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg *(61.7%)*	81 %	4
Grain	Strzegom Wiedeński	1 kg *(12.3%)*	79 %	10
Grain	Strzegom Karmel 150	0.6 kg *(7.4%)*	75 %	---
Grain	Strzegom Czekoladowy 1200	0.3 kg *(3.7%)*	68 %	1202
Grain	Caramel/Crystal Malt - 10L	0.2 kg *(2.5%)*	75 %	20
Grain	Żytni	1 kg *(12.3%)*	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	15 min	4 %

Extras

Type	Name	Amount	Use for	Time

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Flavor	jęczmień palony	300 g	Mash	5 min