

# tmavy lezak

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **27**
- SRM **30**
- Style **Dark American Lager**

## 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 **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **10.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.8 kg (50%)	81 %	4
Grain	Monachijski typ II 20-25 EBC Weyermann	1 kg (27.8%)	80 %	20
Grain	Special W Malt	0.2 kg (5.6%)	65.2 %	315
Grain	Special B Malt	0.2 kg (5.6%)	65.2 %	315
Grain	chateau Crystal Malt	0.1 kg (2.8%)	72 %	150
Grain	Pszeniczny Czekoladowy	0.1 kg (2.8%)	73 %	1001
Grain	Jęczmień palony	0.1 kg (2.8%)	55 %	985
Grain	Carafa	0.1 kg (2.8%)	70 %	664

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	12 g	70 min	11.5 %
Boil	Saaz (Czech Republic)	16 g	15 min	4.5 %

## Notes

- Słody palone na 5 minut w 76 stopniach  
*Apr 14, 2023, 4:57 PM*