

# 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<br>20-25 EBC<br>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<br>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    | Iunga                 | 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*