

## Polish Dubbel

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- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **19**
- SRM **27.4**
- Style **Belgian Dubbel**

### Batch size

- Expected quantity of finished beer **44 liter(s)**
- Trub loss **5 %**
- Size with trub loss **47.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **50.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **45 liter(s)**

### Steps

- Temp **45 C**, Time **1 min**
- Temp **55 C**, Time **15 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **35 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **1 min** at **45C**
- Keep mash **15 min** at **55C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **25.4 liter(s)** of **76C** water or to achieve **50.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	8 kg (65.6%)	81 %	4.5
Grain	Strzegom Monachijski typ I	2 kg (16.4%)	79 %	16
Liquid Extract	ekstrakt słodowy karmelowy	1.2 kg (9.8%)	90 %	320
Sugar	Belgijski cukier kandyzowany	1 kg (8.2%)	100 %	600

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	50 min	7.3 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	10 min	3.7 %
Whirlpool	Saaz (Czech Republic)	20 g	20 min	3.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - Trappist High Gravity	Ale	Slant	500 ml	Wyeast Labs
FM25 Klasztorna medytacja	Ale	Slant	500 ml	Fermentum Mobile

## Notes

- Gotowanie 17.04.2020  
Start fermentacji 18.04.2020  
Połowa gęstwa z BPA Wyeast Trappist High Gravity  
Połowa gęstwa z Belgian Golden Ale FM25  
27.04.2020  
3l soku pomarańczowego + 15l (FM25)  
1,5l roztworu cukru + 20l (FM25)  
0,5l roztworu cukru + 10l (Wyeast Trappist High Gravity)  
2.05.2020 rozlane na cichą ~8 BLG  
6.05.2020 rozlane do butelek  
*Oct 6, 2019, 6:03 PM*