pils polska

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **21**
- SRM **4.1**

Batch size

- Expected quantity of finished beer **75 liter(s)**
- Trub loss **2 %**
- Size with trub loss **77.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **5 %/h**
- Boil size **83.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **46.2 liter(s)**
- Total mash volume **61.6 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **46.2 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **72C**
- Sparge using **52.4 liter(s)** of **76C** water or to achieve **83.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	12.4 kg *(80.6%)*	80 %	4
Grain	Monachijski	2.08 kg *(13.5%)*	80 %	16
Grain	Weyermann - Carapils	0.78 kg *(5.1%)*	78 %	4
Grain	zakwaszający	0.13 kg *(0.8%)*	80 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	30 g	80 min	12 %
Boil	Saaz (Czech Republic)	30 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	60 g	10 min	4.5 %
Boil	Saaz (Czech Republic)	60 g	1 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory

braniewo	Lager	Slant	500 ml	Fermentis Division of S.I.Lesaffre

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	18.75 g	Boil	15 min