Pils Lutra 2.0

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **4.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **--- %**
- Size with trub loss **15 liter(s)**
- Boil time **80 min**
- Evaporation rate **15 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **10.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.35 kg *(93.1%)*	81 %	4
Grain	Strzegom Monachijski typ I	0.25 kg *(6.9%)*	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	18 g	60 min	8.1 %
Boil	Marynka	10 g	5 min	8.1 %
Boil	Hallertau Mittelfruh	20 g	5 min	4.8 %
Whirlpool	Hallertau Mittelfruh	30 g	15 min	4.8 %
Boil	Centennial	4 g	60 min	9.9 %