

## POL-EX (Dawniej Ex-Pol)

- Gravity **17.3 BLG**
- ABV ---
- IBU **53**
- SRM **8.3**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Karmelowy Czerwony	0.1 kg (1.5%)	75 %	59
Dry Extract	WES ekstrakt słodowy jasny	0.216 kg (3.2%)	80 %	---
Grain	Weyermann - Pale Wheat Malt	0.5 kg (7.4%)	85 %	5
Grain	Strzegom Pilzneński	1 kg (14.9%)	80 %	4
Grain	Strzegom Karmel 30	0.4 kg (6%)	75 %	30
Grain	Strzegom Pale Ale	0.5 kg (7.4%)	79 %	6
Grain	Weyermann - Pale Ale Malt	4 kg (59.6%)	85 %	7

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Boil	Lublin (Lubelski)	46 g	5 min	4 %
Boil	Sybilla	56 g	5 min	3.5 %
Boil	Sybilla	50 g	1 min	3.5 %
Dry Hop	Sybilla	50 g	7 day(s)	3.5 %

Dry Hop	Lublin (Lubelski)	50 g	7 day(s)	4 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis