

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 Pilznieński | 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 % |
|---------|-------------------|------|----------|-----|

Yeasts

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