

DO WARZENIA - AIPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **47**
- SRM **5.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **1500 liter(s)**
- Trub loss **5 %**
- Size with trub loss **1575 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **1811.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **1350 liter(s)**
- Total mash volume **1800 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **1350 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **911.3 liter(s)** of **76C** water or to achieve **1811.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 225 kg (50%) | 80 % | 5 |
| Grain | Weyermann - Bohemian Pilsner Malt | 100 kg (22.2%) | 81 % | 4 |
| Grain | Monachijski | 50 kg (11.1%) | 80 % | 16 |
| Grain | Strzegom Wiedeński | 50 kg (11.1%) | 79 % | 10 |
| Grain | Pszeniczny | 25 kg (5.6%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Chinook | 160 g | 60 min | 13 % |
| Boil | Columbus/Tomahawk/Zeus | 160 g | 60 min | 15.5 % |
| Boil | Simcoe | 160 g | 60 min | 13.2 % |
| Boil | Chinook | 160 g | 50 min | 13 % |
| Boil | Columbus/Tomahawk/Zeus | 160 g | 50 min | 15.5 % |
| Boil | Simcoe | 160 g | 50 min | 13.2 % |
| Boil | Chinook | 200 g | 30 min | 13 % |
| Boil | Columbus/Tomahawk/Zeus | 200 g | 30 min | 15.5 % |

| | | | | |
|-----------|----------|--------|--------|--------|
| Boil | Simcoe | 200 g | 30 min | 13.2 % |
| Boil | Simcoe | 400 g | 15 min | 13.2 % |
| Boil | Chinook | 400 g | 15 min | 13 % |
| Whirlpool | Citra | 500 g | 20 min | 12 % |
| Whirlpool | Amarillo | 1300 g | 20 min | 9.5 % |
| Whirlpool | Simcoe | 700 g | 20 min | 13.2 % |
| Whirlpool | Chinook | 600 g | 20 min | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 1000 g | --- |