

Wolna Amerykanka

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **78**
- SRM **4.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------|----------------|-------|-----|
| Grain | Pilznieński | 4.2 kg (61.8%) | 81 % | 4 |
| Grain | Pszeniczny | 2.1 kg (30.9%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (7.4%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 35 g | 60 min | 15.5 % |
| Aroma (end of boil) | Equinox | 30 g | 10 min | 13.1 % |
| Aroma (end of boil) | Equinox | 20 g | 5 min | 13.1 % |
| Whirlpool | Equinox | 50 g | 10 min | 13.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|------|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Slant | 300 ml | Fermentum Mobile |