

ŽIPA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **81**
- SRM **9.3**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **33 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **45.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **41.4 liter(s)**
- Total mash volume **53.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **41.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **45.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 8 kg (67.6%) | 80 % | 5 |
| Grain | Žytni | 3.5 kg (29.6%) | 85 % | 8 |
| Grain | Strzegom Czekoladowy ciemny | 0.08 kg (0.7%) | 68 % | 1200 |
| Grain | Strzegom Karmel 30 | 0.25 kg (2.1%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil | lunga | 80 g | 60 min | 11 % |
| Boil | Cascade | 30 g | 20 min | 6 % |
| Boil | Amarillo | 30 g | 15 min | 9.5 % |
| Boil | Citra | 30 g | 10 min | 12 % |
| Whirlpool | Sabro | 30 g | 25 min | 15 % |
| Whirlpool | Citra | 30 g | 25 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

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|-----------------------------|-----|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Slant | 180 ml | Fermentum Mobile |
| FM52 Amerykański Sen | Ale | Slant | 250 ml | Fermentum Mobile |