

# Szmulka

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **50**
- SRM **4.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **75C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński  | 4 kg (61.5%)  | 80 %  | 4   |
| Grain | Viking Pale Ale malt | 2 kg (30.8%)  | 80 %  | 5   |
| Grain | Pszeniczny           | 0.5 kg (7.7%) | 85 %  | 4   |

## Hops

| Use for | Name        | Amount | Time     | Alpha acid |
|---------|-------------|--------|----------|------------|
| Boil    | Chinook     | 20 g   | 60 min   | 13 %       |
| Boil    | Chinook     | 10 g   | 30 min   | 13 %       |
| Boil    | Sorachi Ace | 20 g   | 15 min   | 10 %       |
| Boil    | Amarillo    | 20 g   | 10 min   | 9.5 %      |
| Dry Hop | Sorachi Ace | 10 g   | 4 day(s) | 10 %       |
| Dry Hop | Amarillo    | 10 g   | 4 day(s) | 9.5 %      |

## Yeasts

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