

# spipa

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **58**
- SRM **3.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **17.3 liter(s)**

## Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.1 liter(s)**

## Steps

- Temp **63 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **5 min** at **75C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **17.3 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield  | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | BESTMALZ - Best Pilsen | 2.4 kg (82.8%) | 80.5 % | 4   |
| Grain | Weyermann - Carapils   | 0.25 kg (8.6%) | 78 %   | 4   |
| Grain | Oats, Flaked           | 0.25 kg (8.6%) | 80 %   | 2   |

## Hops

| Use for   | Name   | Amount | Time     | Alpha acid |
|-----------|--------|--------|----------|------------|
| Boil      | lunga  | 25 g   | 60 min   | 12 %       |
| Whirlpool | zombie | 50 g   | 1 min    | 10.3 %     |
| Whirlpool | Zula   | 50 g   | 1 min    | 10 %       |
| Dry Hop   | zombie | 70 g   | 5 day(s) | 10.3 %     |
| Dry Hop   | Zula   | 70 g   | 5 day(s) | 10 %       |

## Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| US-05 | Ale  | Slant | 100 ml | ---        |