

# USA PILS

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **35**
- SRM **7.2**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **72 C**, Time **60 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (86.2%)   | 80 %  | 4   |
| Grain | Karmelowy Czerwony  | 0.8 kg (13.8%) | 75 %  | 59  |

## Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Marynka               | 30 g   | 60 min | 10 %       |
| Boil                | Saaz (Czech Republic) | 20 g   | 20 min | 4.5 %      |
| Aroma (end of boil) | Saaz (Czech Republic) | 20 g   | 0 min  | 4.5 %      |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 400 ml | Fermentis  |