

# Apa z malinami

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **17**
- SRM **4.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **550 liter(s)**
- Trub loss **2 %**
- Size with trub loss **561 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **617.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **360 liter(s)**
- Total mash volume **480 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **78 C**, Time **15 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **360 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **377.9 liter(s)** of **76C** water or to achieve **617.9 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 90 kg (75%)   | 80 %  | 4   |
| Grain | Słód pszeniczny     | 16 kg (13.3%) | 82 %  | 5   |
| Grain | Monachijski         | 14 kg (11.7%) | 80 %  | 16  |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Saaz (Czech Republic) | 500 g  | 60 min | 4.5 %      |
| Boil    | Saaz (Czech Republic) | 500 g  | 30 min | 4.5 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| Us-05 | Ale  | Dry  | 500 g  | Fermentis  |