

# AW

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **17**
- SRM **3.4**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **12.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.6 liter(s)**
- Total mash volume **8.8 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **6.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **12.8 liter(s)** of wort

## Fermentables

| Type  | Name        | Amount       | Yield | EBC |
|-------|-------------|--------------|-------|-----|
| Grain | Pszeniczny  | 1.1 kg (50%) | 85 %  | 4   |
| Grain | Pilznieński | 1.1 kg (50%) | 81 %  | 4   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 2.5 g  | 60 min   | 15.5 %     |
| Aroma (end of boil) | Mosaic                 | 7 g    | 5 min    | 10 %       |
| Aroma (end of boil) | denali                 | 7 g    | 5 min    | 14 %       |
| Whirlpool           | Mosaic                 | 10.5 g | 0 min    | 10 %       |
| Whirlpool           | denali                 | 10.5 g | 0 min    | 14 %       |
| Dry Hop             | Mosaic                 | 28.5 g | 3 day(s) | 10 %       |
| Dry Hop             | denali                 | 28.5 g | 3 day(s) | 14 %       |

## Yeasts

| Name                           | Type | Form  | Amount | Laboratory |
|--------------------------------|------|-------|--------|------------|
| WLP090 - San Diego Super Yeast | Ale  | Slant | 500 ml | White Labs |

## Notes

- Ew. zamień denali na citre. Jeśli denali - szmata  
*Nov 15, 2017, 3:39 PM*