

# Solidnie

- Gravity **19.1 BLG**
- ABV **8.3 %**
- IBU **84**
- SRM **5.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **20 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **75C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount        | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 5 kg (66.7%)  | 80 %  | 7   |
| Grain | Strzegom Pilzneński    | 1 kg (13.3%)  | 80 %  | 4   |
| Sugar | Cukier                 | 0.5 kg (6.7%) | --- % | --- |
| Grain | Pszeniczny             | 1 kg (13.3%)  | 85 %  | 4   |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Lublin (Lubelski) | 30 g   | 50 min | 4 %        |
| Boil                | Amarillo          | 30 g   | 50 min | 9.5 %      |
| Aroma (end of boil) | Equinox           | 30 g   | 50 min | 13.1 %     |
| Aroma (end of boil) | Citra             | 30 g   | 15 min | 12 %       |
| Aroma (end of boil) | Cascade           | 30 g   | 7 min  | 6 %        |

## Yeasts

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