

AMERICAN WHEAT #19

- Gravity **12.1 BLG**
- ABV ---
- IBU **47**
- SRM **4.7**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.2 liter(s)**

Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|------|
| Grain | Bruntal - pilzneński | 2.2 kg (47.8%) | 81 % | 3.75 |
| Grain | Bruntal - pszeniczny | 2.2 kg (47.8%) | 83 % | 4.5 |
| Grain | Bruntal Carahell | 0.2 kg (4.3%) | 77 % | 26 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Marynka | 25 g | 60 min | 9.5 % |
| Boil | Citra | 15 g | 15 min | 12 % |
| Boil | Amarillo | 15 g | 15 min | 7.5 % |
| Aroma (end of boil) | Citra | 15 g | 3 min | 12 % |
| Aroma (end of boil) | Amarillo | 15 g | 3 min | 7.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 6 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|-------|
| Water Agent | gips | 5 g | Mash | --- |
| Fining | mech irlandzki | 3 g | Boil | 7 min |