

AMMONIUM SULFATE

Pure crystallized ammonium sulfate

FERMENTATION ACTIVATOR

CHARACTERISTICS

- ◆ Molecular weight (Mw) = 132.10
- ◆ Formula = $(\text{NH}_4)_2 \text{SO}_4$
- ◆ White crystalline powder.
- ◆ **AMMONIUM SULFATE** is enologically interesting because of its ammoniacal nitrogen content. This compound is required for the biosynthesis of both yeast proteins, which are necessary for cell multiplication, and yeast cell walls, which are necessary to bring the sugar in the cells.
Without nitrogen, the yeasts can neither multiply nor ferment the sugar.
- ◆ The nitrogen present in musts is rapidly degraded during the first hours of the fermentation. The lack of nitrogen then leads to sluggish or stuck fermentations.
- ◆ Consequently, the addition of **AMMONIUM SULFATE** at the beginning of the alcoholic fermentation allows to fully carry out the fermentation.
- ◆ However, if the must is highly clarified and nitrogen deficient, it is recommended to use inactivated yeast and ammonium sulfate-based activators (**ACTIFERM 1-2**) in order to ensure a complete fermentation.

REGULATIONS

- ◆ The utilization of **AMMONIUM SULFATE** is regulated (EC regulation 1493/99)
- ◆ Maximum legal rate : 100 g/100 liters.
- ◆ This application rate cumulates with other authorized ammonium salts (diammonium phosphate, ammonium bisulfite) or with complex nutrients containing an ammonium salt. Global limit is 1 g/L (100 g/100 Liters).
- ◆ Please note that the utilization of **AMMONIUM SULFATE** is limited to musts or fermenting musts only.

APPLICATION RATES

- ◆ **At yeast inoculation :**
10 to 15 g/100 Liters.

◆ **During alcoholic fermentation :**

Specific gravity of approximately 1040 : 10 to 15 g/100 Liters.

Combine addition to the must with oxygenation (or aeration).

(See the following technical data sheets : **OXYFRITTE, OXYFUT**).

To restart a stuck fermentation: 10 to 20 g/100 Liters.

INSTRUCTIONS FOR USE

- ◆ Dissolve the **AMMONIUM SULFATE** in must (1 kg/10 Liters).
- ◆ Add at yeast inoculation or at the end of the first third of the alcoholic fermentation at the latest.

PACKAGING

- ◆ 1 kg bag–25 X 1kg box.
- ◆ 25 kg bag.

STORAGE

- ◆ Store full, unopened package away from light in a dry and odourless area.
- ◆ Open package : use rapidly.