

Advantages and disadvantages of using sulfamic acid.

Solution:

Sulfamic acid is a colorless crystals substance, formula of which is $\text{NH}_2\text{SO}_2\text{OH}$. It melts at a temperature of 200-205 °C with the decomposition. It has a high solubility in water. At a temperature of 260 °C completely decomposes into nitrogen, water and sulfur dioxide. Sulfamic acid is not toxic.

Sulfamic acid is used:

1. For cleaning of industrial equipment:
 - sediment of minerals (hardness, oxide films, compounds of iron);
 - From milk and beer stone.
2. In public catering establishments and in everyday life:
 - For use in formulations of cleaning agents.
3. As raw material for the synthesis of chemicals:
 - For fire-resistant materials;
 - For herbicides.
4. In electroplating:
 - For the preparation of electrolytes.
5. To remove the mucus from the water-cooling systems (basins).

Advantages of using Sulphamic Acid

- Sulphamic Acid has very high shelf life.
- Sulphamic acid has very high effectivity of the descaling.
- The solid can be directly charged to system eliminating the cost of system reduces the leave of scaling solids and acts as anti - descalant.
- Complete cleaning can be chemically achieved by Sulphamic acid and does not require post descaling manual cleaning.
- No system required for dosing.
- It is recommended to does into the cooling water for descaling the condenser on running plant.
- Sulphamic acid is safe acid and has no handling hazards.

Disadvantages of using Sulphamic Acid

- Provides a strong irritant effect to the skin and mucous membranes of the eyes.