

ALUM SALT

(rock alum , potassium alum)

FEATURES

- **General information**

ALUM SALT occurs naturally in the form of efflorescence in volcanic areas. It is pure in the minerals alunite and kalinite .

It is also obtained by treating bauxite with sulfuric acid and subsequently with potassium sulfate.

It can also be prepared from alunites (the minerals are roasted in a reverberatory furnace).

ALUM SALT appears as large, colorless, transparent, octagonal or cubic crystals that slowly fade in the air , or as a **white crystalline powder**.

When heated, it melts into its water of crystallization, and, upon further heating (up to 200 degrees), it dehydrates completely, swells again and transforms into a spongy mass which constitutes burnt alunite.

- **Use**

ALUM SALT is used in particular in the preparation of limewashes and mortars, it helps to avoid powdering and to fix the color, and also to accelerate carbonation by helping the lime to fix the carbon dioxide. However , be careful of the whitish traces (salts) that it can cause due to its reaction with lime.

Indoors only, it is used diluted in water as an impregnation layer on mineral surfaces, which reinforces the hardness of the coating while forming a waterproof layer (protection against water, nicotine and soot stains). This also helps regulate the absorption of mineral surfaces.

Other uses: as a mordant in dyeing, in the preparation of water-repellent varnishes, inks and waterproofing agents, in the purification of boiler water, in medicine as an astringent and haemostatic, in the preparation of powdered yeast, in the manufacture of aluminium salts, in the sugar industry as a clarifier, in cosmetics for astringent lotions and after-shave lotions, in photography as a hardener or in fixing baths, in the cement and mastics industry as an additive capable of facilitating setting, in the formulation of foam-type fire-fighting agents.

IMPLEMENTATION

- **Preparation of the mixture**

In the preparation of limewashes and mortars: dilute 100g of **ALUM SALT** in approximately 200g of hot water until completely dissolved and incorporate the solution obtained into the lime (approximately 250g to 1 kg of salt / 10kg of lime, i.e. 2.5% to 10%).

Preparation of the solution for use as an impregnation layer: dilute the **ALUM SALT** by stirring in hot water (100g of salt for 1 liter of water) until completely dissolved.

A background of salt crystals is normal, and only shows that the solution is saturated with salt: do not use this background.

- **Application**

As an impregnation layer, apply the solution with a brush in an even layer to saturate the surface. Allow to dry thoroughly between coats. Work at a temperature of at least 8°C.

To seal and harden the surfaces, it is recommended to apply a second coat of solution. Before applying the paint, be sure to brush off any excess dried salt crystals.

- **Drying**

Dry and recoatable after approximately 24 hours.

- **Consumption**

Approximately 1 kg of salt / 10 kg of lime for preparing whitewashes or mortars

Approximately 10 to 20 g of salt/m² in an impregnation layer depending on the absorption of the support

- **Practical advice**

Clean tools with water immediately after use.

Operating temperature from +10°C to +30°C.

PRECAUTION FOR USE

Non-toxic product. Protect your eyes (goggles). In case of contact with eyes or skin, rinse thoroughly with fresh water and consult a doctor if symptoms persist. If swallowed, drink plenty of water and consult a doctor. Do not breathe dust. Keep out of reach of children. Mildly acidic product, protect surrounding areas from possible splashes, otherwise clean immediately. Do not dispose of residue in the drain. Dry before disposing of it.

CONSERVATION

Virtually unlimited in raw state in original sealed packaging away from moisture.

Prepared solutions can be stored for several weeks in a cool, closed container that does not rust and away from air.

PACKAGING

1 kg bag and 10 kg bag.

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