

Technical information

Defoamers Chemical

Anti-Foam Agents

Rockdefoam 8040 is a very efficient defoamer which can be safely used during the manufacture of sugar and potato only.

Properties:

Appearance: Clear pale yellow liquid

Nature: Modified linear organic esters

Ionicity: Anionic

pH (1:10 solution): 7 - 8

Activity: 38 – 40

Solid %: 41 ± 1

Solubility: Dilution with 50% water does not exhibit any gel formation

Density(g/cm³): 1.06 ± 0.2

Solidification: -5°C

Viscosity at 25°C: S3 R50 1600 cp

Moisture: 40 ± 2

Shelf life: Min 12 months

Storage: The same

Pump ability: Due to Non-Gelling/Non-Thickening behavior even at 0°C, does not pose any problem in pumping or choking of pipe lines

Packing: ??

Rockdefoam 8040

Applications & Recommendation

When nitric acid is added to the phosphate rock, the digester has a temperature of about 60°C and the acid strength is 60%. At the evaporation stage the temperature is 180°C.

Rockdefoam 8040 has proved to be very powerful defoamer in the manufacture of complex fertilizers produced from the following important rock phosphates:

Kola Phosphate, USSR, Morocco Phosphate, Florida Phosphate, Granges Phosphate, Sweden, Jordanian Phosphate Usually, foam is caused by carbonates in the appetites out of five different rock phosphates mentioned above. Florida phosphate and Morocco phosphate cause great foam problems. Quantities of Rockdefoam 8040 used in these two varieties vary between 0.05 to 0.1% on the weight of rock, i.e. 500 grams to 1 kg of Rockdefoam 8040 for 1 ton of rock is sufficient to suppress foam. However, this quantity may change depending upon conditions during operation. NPK fertilizers was found to be very effective in suppressing foam formed during manufacture of NPK fertilizers. Generally foaming is, caused due to the following factors:

- Decomposition of Urea with phosphoric acid
- Presence of soot in the system.
- Dissolution of rubber lining which gives rise to gasses
- Plant conditions

Foaming caused due to various reasons mentioned above can easily be suppressed by dosing 0.005 to 0.05% of Rockdefoam 8040 on the weight of scrubber liquor/fertilizer slurry. Sometimes, higher doses are, required when foaming is very severe. Dosing of Rockdefoam 8040 can be done from overhead tank or with the help of a plunger type of pump.

ADVANTAGES

Rockdefoam 8040 defoamer exhibits the following outstanding characteristics in actual plant usage:

- Lowers the surface and interfacial tension.
- Significantly lowers defoamer cost per ton of acid produced.
- Promote more complete reaction.
- Does not affect rubber tank and hose lining.
- Does not discolor or clog filter cloth.
- Improves filtration and crystallization.

NOTE: According to our best knowledge and technical experiments, the above data is true and accurate. Regarding to variety of consumption procedures, it is recommended to evaluate the information before use.