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## Technical Data Sheet

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Defoamer

## Rockdefoam 8050-NPK

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NPK Fertilizer

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### Description

**Rockdefoam 8050-NPK** is a very efficient defoamer which can be safely used in production process of phosphate based fertilizers.

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

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### Specification

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<b>Appearance</b>	Clear liquid	off-white
<b>pH (1:10 solution)</b>	7 ± 0.5	
<b>Cloud Point</b>	≤ 10°C	
<b>Density (g/cm<sup>3</sup>)</b>	1.07	
<b>Solubility</b>	Dilution with 50% water does not exhibit any gel formation.	
<b>Pump ability</b>	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	

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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 8050-NPK** 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 8050-NPK** 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 8050-NPK** for 1 ton of rock is sufficient to suppress foam. However, this quantity may change depending upon conditions during operation.

Foaming caused due to various reasons mentioned above can easily be suppressed by dosing 0.005 to 0.05% of **Rockdefoam 8050-NPK** on the weight of scrubber

### Applications

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:

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**NOTE:** To the best of our knowledge and technical experiments, the above data is true and accurate. Given the variety of consumption fields, it is recommended to evaluate the information before use.



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liquor/fertilizer slurry. Sometimes, higher doses are, required when foaming is very severe. Dosing of **Rockdefoam 8050-NPK** can be done from overhead tank or with the help of a plunger type of pump.

### ADVANTAGES

**Rockdefoam 8050-NPK** defoamer exhibits the following outstanding characteristics in actual plant usage:

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

### PACKING

**Rockdefoam 8050-NPK** is available in 200 kg PE Drums and 1,000 lit IBC Tanks. It is also available in bulk on request through SS Tankers.

### Storage conditions and Shelf Life

To ensure safe storage of this product, containers should be well sealed to prevent water evaporation and skin forming. The product must be stored between 10 - 20°C for between 6 – 12 months. Freezing and direct sun light must be avoided.

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