



Lučební závody a.s. Kolín
Pražská 54, 280 02 Kolín, Czech Republic
☎ +420 321 741 546-7 ✉ odbyt@lucebni.cz



LUKOSAN P2

Silicone Defoamer

Lukosan P2 is an aqueous emulsion of an active silicone component that can be further diluted with water. This silicone defoamer is primarily formulated as a processing aid for controlling unwanted foaming in the **food, fermentation** and pharmaceutical industries.

- Processing aid in starch production and processing, food thickening and dehydration, manufacture of jams, jellies, fruit and vegetable juices, syrups, soft drinks, oil esterification, instant foods, sauces and soup seasonings, fermentation processes, sugar refining and antibiotic production.
- It is also used for foam control in other industrial processes and wastewater treatment plants, including applications under demanding temperature and chemical conditions.

Main Properties

- Very fast, almost instantaneous defoaming effect
- Low dosage without affecting production capacity
- Easy dilution with water
- Effective in nonionic, cationic and anionic systems
- Chemically inert towards the treated medium
- The active component is non-volatile under vacuum or steam distillation conditions and is resistant to oxidative degradation by microorganisms
- Effective in neutral, acidic and mildly alkaline environments; in strongly alkaline media its efficiency gradually decreases due to decomposition of the active silicone component

Dosage

The guaranteed **effective dosage** of the defoamer (undiluted concentrate) is **1 g/L** of foaming liquid. In most applications, a dosage **below 0.5 g/L is sufficient**.

*The required dosage should be determined individually for each application. The effective dosage strongly depends on the nature of the foaming system, mixing intensity, gas input and other operational factors. In many cases, complete foam elimination is not necessary. As a guideline, an initial dosage of **1 g/L of undiluted concentrate** is recommended and may be adjusted according to the acceptable foam level.*



Dilution

- The emulsion may be applied directly; however, for rapid and efficient dispersion and more accurate dosing, dilution to a working concentration is recommended.

Dilution is carried out with water or the treated liquid at a ratio of 1:3 to 1:10 (defoamer : water).

- The diluted emulsion should preferably be used within 2 days and thoroughly **mixed before use**.
- Dilution with water helps prevent possible coagulation of the defoamer in hot or acidic solutions.

Application

- Continuous dosing is recommended to achieve a lasting defoaming effect.
- The defoaming performance may be reduced by coagulation of the defoamer, adsorption of the silicone component on dispersed particles, depletion during continuous processing and other factors such as elevated temperature, intensive agitation, gas sparging, strongly alkaline conditions or fermentation processes. Under such circumstances, more frequent replenishment of the defoamer may be necessary.
- The emulsion is thixotropic. During storage, its viscosity may temporarily vary due to changes in the microstructure. After thorough mixing before use, the viscosity returns to the declared range and proper dispersibility is restored.

Technical Data

Lukosan P2	
Appearance	Aqueous silicone emulsion
Silicone content	20 wt. %
Solids content	Min. 25 wt. %
Viscosity	40 – 100 mPa.s/20 °C (thixotropic)
Density	980 – 1020 kg/m ³
pH	5 - 7
Defoaming value	Max. 1 g/l
Colour	white
Thermal stability	Suitable for cold and hot aqueous systems
Ionic character depending on emulsifier	Nonionic
Water dispersibility	Easily dispersible in cold and hot water, non-flocculating

Health and Safety

- **Lukosan P2** is not classified as a hazardous chemical according to current legislation.
- Good industrial hygiene practices should be observed during handling.
- Accidental contact with the eyes may cause watering similar to irritation by a foreign particle. Rinse thoroughly with clean water and seek medical attention if irritation persists.
- Spillages may create a slip hazard.
- Based on current experience, the use of **Lukosan P2** at recommended application concentrations is not expected to have harmful effects on aquatic organisms or negatively affect biological wastewater treatment processes. The silicone component is not biodegradable and is adsorbed onto suspended particles. The emulsifiers used are biodegradable.
- Nevertheless, large quantities of the concentrate should not be released into surface waters, sewers or soil. In the event of a spill, absorb with an inert liquid-binding material (e.g. diatomaceous earth) and dispose of appropriately. Residual slippery films should be removed with water and detergent.

Disposal of Packaging and Residues

- Containers can be emptied completely by rinsing, draining or wiping with a scraper. Empty packaging may be disposed of with municipal waste or preferably recycled.
- Rinse water residues may be reused for dilution of the concentrate. Unusable product residues should be disposed of by incineration at authorized hazardous waste facilities in accordance with local regulations.

Packaging and Storage

- **Lukosan P2** is normally supplied in 5 kg and 25 kg plastic containers. Other package sizes may be available upon request.
- Store in tightly closed original containers in covered storage areas at temperatures between +5 °C and +30 °C.



Protect from freezing.

- Shelf life is 6 months from the date of filling.

The information contained in this Technical Data Sheet is provided in good faith and for information purposes only. The applications described are not exhaustive. For further information or technical assistance, please contact the Technical Service Department of Lučební závody a.s. Kolín, E-mail: ots@lucebni.cz, www.lucebni.cz.