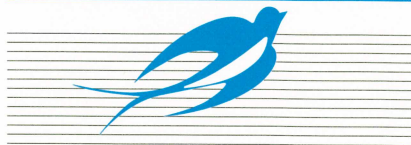
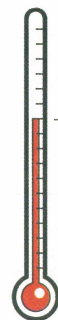


l'hirondelle



mise au net.



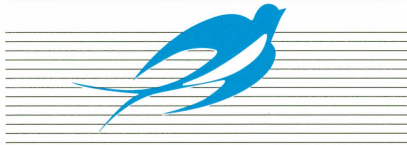
-18°C

**LHIS (FREE-FLOWING FROZEN YEAST)
SPECIAL YEAST FOR FROZEN DOUGH**

The new LHIS (Levure à Humidité Intermédiaire Surgelée - Free Flowing Frozen Yeast) concept has been specially developed by S.I. Lesaffre, in order to allow the professional to improve the stability of frozen dough, and especially for long term storage (more than 3 months).

 **S.I. Lesaffre**

l'hirondelle®



The superiority of LHis over fresh yeast and instant dry yeast for frozen dough.

This new type of yeast does not have the inconvenience of traditional, fresh or instant dry yeasts, in the following ways.

- The shelf life of fresh yeast is limited to 4 weeks at 4°C / 39°F. However, the long term storage of the frozen dough is affected when fresh yeast is only one week old. LHis is at its peak of freshness at a temperature of - 20°C / - 4°F, and has perfectly stable long term gassing power, allowing the user to have, at any time, a top quality yeast to incorporate in frozen dough.

- The drying process weakens the dry yeast cell membranes that makes dry yeast very sensitive to low rehydration temperatures, as well as to the fermentation by-products, and this reduces the shelf-life of frozen dough to no more than 4 to 6 weeks.

LHis, which doesn't have this sensitivity, preserves frozen dough by 3 to 4 times longer.

What is LHis?

It is a yeast which is half way between instant dry yeast and fresh yeast. Like Saf-Instant it has a dry vermicelli look and the advantage of being free-flowing, even at - 20°C / - 4°F.

Like fresh yeast, it is unaffected by oxygen or water vapor thus, does not have to be vacuum packed in sachets. Like fresh yeast, it is unaffected by contact with very cold water. However, like fresh yeast, it must be stored at low temperature.

Level of use

Compared with fresh yeast, the quantity needed is two and a half times less. In other words, when you use 2.5 parts of fresh yeast for 100 parts of flour, you would only use 1 part of LHis.

The difference $2.5 - 1 = 1.5$ represents the part of water which is found in fresh yeast, and that has to be added to the quantity of water which is usually used, in order to obtain the same consistency of dough, and above all, the same efficiency.

Directions for use

LHis is used in the same way as fresh yeast, that is:

- blended dry in flour, before mixing,
- dispersed in water even very cold,
- in the form of a "yeast slurry", stored in a tank, at a temperature below + 4°C / 39°F,
- incorporated in the dough during mixing. The free flowing vermicelli can be used with automatic feeding to the mixer. We recommend that LHis is used straight from the freezer, thus limiting, as much as possible, a temperature rise.

At an ambient temperature of 26°C / 79°F, LHis in its carton goes from:

- 20°C / - 4°F to - 6°C / 21°F in 5 hours
- 20°C / - 4°F to 5°C / 41°F in 10 hours

At an ambient temperature of 4°C / 39°F LHis in its carton goes from:

- 20°C / - 4°F to 0°C / 32°F in 24 hours.

Technical advantages of LHis in frozen dough

It has clearly been shown that the long term shelf life of frozen dough is affected by the start of the fermentation process.

For several reasons, the free flowing vermicelli form of LHis slows down the start of the fermentation process:

- able to be incorporated frozen in the dough (impossible with fresh yeast),
- able to be incorporated while mixing (better distribution than fresh yeast),
- during mixing the fermentation activity is slightly slower than with fresh yeast because the LHis has to absorb water in order to start the fermentation activity (because of the partial dehydration);
- the water difference between the two types of yeast (difference in weight between fresh yeast and LHis), added at the beginning of mixing, allows the dough to develop earlier (faster) and so limits "overheating" and the start of the fermentation;
- the strains and the biochemical composition of LHis are especially suited to insure good stability of the fermentation power.

Two types are available:

- one for lean dough: Hironnelle White,
- one for very sweet dough, rich in fat: Hironnelle Gold.

Packing temperature and shelf-life

LHis is packed under air, in polyethylene sachets of 3.5 kg / 7.7 lbs (4 per carton).

This yeast must be stored at - 18°C / 0°F for use in frozen dough (at this temperature, its fermentation power remains stable for two years).



 S.I. Lesaffre