

# Food Grade Lubricants

What more can we do as an industry?

by *Andre Adam*

As producers of “H1 food grade lubricants” we have an important role in the daily production and supply of food, pharmaceuticals, and support material to the general public as well as to the food chain such as animal feed production and pet food.

With our products we accommodate the equipment builders’ need to construct more complex, faster working equipment often at higher or lower temperatures enabling greater output and better economy with the food production. To achieve this we continue to look for new chemistry and technical solutions where the life of the lubricant is adjusted to the equipment life resulting in reliability and reduced maintenance cost. Supplying the best lubricant for a competitive price is the main challenge for many companies, but I believe that we as an industry have a larger role to play. If we look at what has been happening in the market during the recent years we cannot overlook the incidents that have drawn the attention of the general public and subsequently the politicians. Companies spend much money to promote their brand but the main issue they all fear is when an incident happens. An incident can damage or even destroy a brand in a matter of days.

From our point of view there are four parties involved in the food, feed and pharmaceutical industry that have a common interest; the food producers,

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the law makers, the equipment manufacturers and the lubricant producers. The common interest is to avoid attention from the general public due to having caused an incident that has a negative impact on public health.

**Food producers:** If a product comes into the news connected to contamination, bacterial ingress, or is seen as the cause of disease the damage to the brand is at least very costly from a marketing perspective and legal cost are to be expected.

**Law makers:** If an incident happens the first question that gets in the news always is: why was nothing done about this and why was it allowed to happen. Normally this triggers an unwelcome demand on politicians to take action and to create laws that, most importantly show the politicians’ direct and immediate action, rather than reviewing what has caused the incident. However, when these laws are made the industry has to deal with them and that often increases work and cost in the production process.

**Equipment manufacturers:** The interest from the equipment manufacturers is not limited to their brand value to avoid an incident, but goes into the need for

total equipment re-design if incidents do happen and law makers ban lubricants or demand different HACCP (Hazard Analysis of Critical Control Points) plan input.

**Lubricant producers:** The lubricant producers have an interest in avoiding incidents that route back to the lubricant as the cause since this also impacts the other food producing parties. Lubricant free equipment is difficult to make and expensive (if at all possible) but it could be the result of law makers’ decisions. It is in our interest to create lubricants that meet the technical demands of current and future equipment, but at the same time are safe to use, for the operator during production as well as for the consumer of the final produced product. Many standards are in place to create the basic framework of safer lubrication.

**ISO9001 is commonly known and the basis of all quality systems.**

H1 lubricants are the only lubricants allowed into an application where there is risk of “incidental food contact” like a gearbox above a conveyer belt where leakage could be a risk. H1 lubricants are made of components registered



by the USFDA under 21 CFR 178.3570 or as GRAS and when used in the allowed quantities the final product can be registered as H1 lubricant. The registration is done by non governmental bodies like NSF or InS. The next step a lubricant producer can take is to obtain an extended certification of his production facility and practice. This is known as ISO 21469 and could be in simple terms called an HACCP plan for the lubricant producer. The lubricant producer not only uses safe components to make his lubricants, but takes a number of steps to safeguard the production of the lubricant from, among other things, contamination.

What more can we do as an industry to support the users of our lubricants?

- H1 is from origin a US(DA) registration but has evolved to a globally recognized status. It would be preferred to avoid, or even ban usage of terms like food safe, food lubricant and many variations used by less responsible suppliers not having an H1 registration.
- H2 lubricants are confusing the market. They give the impression that it is a variation to H1, but their use is strictly banned from incidental food contact. Discontinuation of the H2 would be a preferred option but can only be done by the industry itself. The original safety that was brought to the market many years ago has been replaced by more modern health and safety rules as well as the current REACH initiative from the EU.

- Continue training the users of H1 food lubricants and help them with their HACCP plans, including the use and lubricant consumption. The FDA has stated maximum levels of lubricant contamination in the food stuff and these vary per chemical, but how to deal with this is not outlined. Together with EHEDG (European Engineering and Design Group) we work on best practice guidelines that will include lubricant consumption measuring.
- Expand the GMP and HACCP practices to our own production

by meeting the ISO 21469 quality standards and train the market on what it means for extra product safety.

- Work together and train law makers so they are aware of what we do as an industry to make food production safer, but also to help them to make laws that are possible to execute at reasonable expense rather than ad-hoc decisions that create expensive problems for all stake holders.

The end result will be that we have created increased safety for all consumers by safer production of better lubricants for food and pharmaceutical producers that can make better choices due to increased awareness of what makes a better and safer lubricant and where lawmakers realize that we take our responsibility in society seriously.

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