Today, chemicals used in food processing, including lubricants and greases, are almost always accompanied by complex product labels and technical data sheets that contain a wide range of performance claims, safety and hazard information, use instructions and limitations, symbols, certifications and regulatory information. So with all of this highly technical information at hand, how are end-users able to find the most relevant information in a very crowded space – the product label? The key is education. Decades of experience in food safety has given NSF insight into the particular challenges associated with correctly labelling food grade lubricants. This article provides background behind some common product labelling mishaps and education to help end-users ensure that the products they are using are labelled accurately and in compliance with food safety requirements.

**Avoiding labelling confusion**

The majority of consumers are well-versed when it comes to deciphering product labels on cereals, frozen meals, snacks, beverages and other packaged foods. Very often, a quick scan of the ingredient list, nutritional information, certifications, ‘free from’ claims and ‘best by’ date tells us much of what we need to know about the identity, quality and shelf life of the food about to be purchased. While consumer product labels have evolved over time to become increasingly user-friendly and readable at a glance, the same is not necessarily true for industrial chemicals, including food grade lubricants.

**Complex regulations add to the confusion**

Increasingly complex chemical regulations, new food laws and highly competitive markets give rise to products that are too often labelled with inaccurate or misleading information. In the United States, emerging regulations such as the Food Safety Modernisation Act (FSMA), coupled with the well-established but highly complex FIFRA regulations overseen by the Environmental Protection Agency (EPA), can make it challenging for food grade product manufacturers to ensure that they are labelling their products in accordance with the letter of the most current regulations. Often, the requirements are so complex that companies seek advice from independent legal firms to help guide them through the maze of regulations. In the US as well as in other countries, chemical products are regulated by sector / target audience, while likewise...
FOOD GRADE LUBRICANTS

S U P P L E M E N T

different agencies regulate the workplace, consumers, agricultural chemicals and transportation. Thus, labels for these sectors will vary both in the US and globally, causing confusion. In Europe, REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) has taken the spotlight as the premier chemical safety reform initiative as of 1 June 2007. The primary objective of REACH is "to ensure a high level of protection of human health and the environment," while at the same time enhancing the innovation and competitiveness of the EU’s chemicals market. In the coming decade, REACH will place the burden of providing proof on the industry. This will require industry to collect or generate the necessary data to ensure that all chemicals that enter the marketplace are safe to use. REACH also provides rules for the phasing out and substitution of the most dangerous chemicals. REACH is complemented by the new Regulation for Classification, Labelling and Packaging of Substances and Mixtures (CLP Regulation, January 2009). This Regulation incorporates the classification criteria and labelling rules agreed upon at the UN level, or more commonly referred to as the Globally Harmonised System of Classification and Labelling of Chemicals (GHS). It is based on the principle that the same hazards should be described and labelled in the same way all around the world. Using internationally agreed classification criteria and labelling elements is expected to not only protect humans and the environment from the negative effects of harmful chemicals but also to facilitate trade and strengthen channels for international commerce.

Not all claims are created equal

One often overlooked challenge is that most chemical manufacturers, including food grade lubricant producers, have dedicated technical teams that understand and monitor regulation changes but different teams are often tasked with developing and updating product labels. While the marketing teams developing the labels often know the message they want to convey to their buyer about the product, that doesn’t always pair well with the regulatory or industry requirements. Key terms that may seem to convey specific messaging about a product doesn’t always pair well with the regulatory or industry requirements.

Keep in mind that some products are not for direct food contact but may occasionally come into contact with food. In any terms that the lubricant or grease is safe for direct food contact, or normal use conditions. It is important that the product label not convey that food is safe for consumption, if contact occurs.

Impact of improper labelling on food safety

From misconceptions to marketing tactics to regulatory changes, keeping up with what is acceptable on a food grade lubricant label can be challenging. The impacts of when a label is improperly marked or contains unacceptable information can cause a significant impact in the timing of a product launch and can also be very costly for a manufacturer. Labels are often seen as a marketing mechanism for a product but they are really much more than that and are a building structure for all things, including regulations, instructions for use, safety warnings and also a sales mechanism for the product.

Improper labelling of products can lead to misconceptions within the industry. Most of these misconceptions stem around wording used to sell a product that implies that it is safe to be used in contact with food. H1 lubricants, also known as incidental contact lubricants, are not expected to, but may occasionally come into contact with food under normal use conditions. It is important that the product label not convey in any terms that the lubricant or grease is safe for direct food contact, or that food is safe for consumption, if contact occurs.

Not only will improper labels cause misconceptions about a product, but these mistakes can also be expensive to remedy. The cost behind mislabelled products can result from product recall efforts, reprinting, not to mention impeding the timing of a product launch due to these delays. Not only will improper labels be costly for a lubricant manufacturer but they also can be just as costly for the end user of these lubricants. If a food manufacturing facility is inspected by a regulatory agency and products are found to be used that are improperly labelled for the appropriate end use, fines product holds, and recalls can cost the food manufacturer thousands of dollars.

Guidance on labelling

Per requirements established by the US Food and Drug Administration (FDA), H1 lubricants must comply with 21 CFR 178.3570. This regulation establishes formulary requirements for greases and lubricants intended for use in food processing and handling applications where incidental contact may occur.

The following information provides clarity on both the technical and marketing aspects of label development to help ensure that products are labelled accurately and in compliance with food safety requirements. Here are some examples of the type of information that end-users of food grade lubricants, greases, and other chemical processing aids should be seeing on labels or data sheets of products that are properly labelled.

Acceptable label statements:

These statements are acceptable to use for H1 or Incidental Contact Lubricants:

- "Food Grade"
- "Ingredients meet FDA Regulation 178.3570” or “21 CFR 178.3570”
- "NSF H1 Registered” or “Registered with NSF as an H1”
- “Meets USDA 1998 Guidelines”
- “Suitable for Use in the Food Industry”

Label Statements to Avoid:

These statements should NOT be used for H1:

- “Unforeseen” or “Unexpected Contact”
- “Occasional” or “Indirect Contact”
- “FDA Approved” or “FDA Approved for Incidental Contact”
- “Food Approved”
FOOD GRADE LUBRICANTS

SUPPLEMENT

- “Food Lubricant”
- “USDA Approved”
- “Authorised for Use in Meat and Poultry Plants”

Third-party registration
The NSF mark symbolises a strong brand that represents food quality and safety to businesses, consumers and regulators alike. Today, the NSF mark can be found on thousands of registered products. To carry the NSF Registration mark, a product must be independently evaluated and verified by NSF to meet the NSF Registration Guidelines. Placement on the front of packaging is preferred to ensure easy identification along with the specific category code(s) in which the product is registered to and the registration number. The category code will identify the specific end use in which the product was reviewed and registered to and the registration number is a unique number given by NSF per product to directly link back the specific product to a particular registration. NSF Registered products appear in the official NSF Listing on the NSF website (www.nsfwhitebook.org/).

Proper labelling of H1 vs. H2 products
If you see an apple on a product label, don’t just assume the product can be applied directly to an apple and would be safe. Generic graphics and images of food (for example pictures of fruit, meat, bottled beverages, etc.) are acceptable on H1 product labels, provided there is no indication that direct food contact is acceptable. Graphics and images of food may not be used on H2 product labels.

H2 products are products that are used on equipment and machine parts in locations where there is no possibility of the lubricant or lubricated part contacting edible products. There is not a specific list of substances that may be used as lubricants where there is no possibility of food contact. There may be substances that are not acceptable because of unfavourable toxicology or other considerations, so therefore, each preparation will be evaluated on its own merit. The terminology ‘Food Grade’ is only acceptable for H1 products. H2 products should never contact food, thus labelling it as ‘Food Grade’ implies an incorrect end use.

EPA registered product labelling
If a product is sold or distributed in the United States, any claims or description of a product’s disinfectant, bactericide, preservative or similar function must be officially registered with the US Environmental Protection Agency (EPA) in accordance with 40 CFR 152.15. This includes claims that the product inhibits or contains ingredients that inhibit bacterial growth.

Again, with an EPA registration, there are acceptable statements to make about a product on its label and there are also statements that are not acceptable. For example, if a product is EPA registered, it is acceptable for the product to claim ‘Sanitary’ as the language implies cleanliness only, or ‘Hygienic’, if there is no indication that the product is a preservative. Likewise, if a product label states “[Product] does not promote the growth of bacterial or fungal organisms” or “Resists microorganisms” these are not acceptable statements. Specific to EPA registered products,

FRAGOL

Private Label
H1-Lubricants

FRAGOL offers you superior quality H1-Lubricants. Our certified production process and our state of the art formulations guarantee that our customers receive food grade lubricants meeting the toughest requirements of food plant and other demanding applications.

The benefit for our customers? Not only can you leave R+D with us. We also take over filling and packaging with your brand so that you can buy the finished product ready for retail.

Contact us under lubes@fragol.com
Maximum food safety, maximum production output, minimal costs: Klüber Lubrication helps you achieve all these goals more easily. Our high-performance NSF H1-lubricants are ISO certified speciality lubricants for the best possible taste.

Combating improper labelling
Education is the key to resolving improper labelling issues. This education needs to target both those developing and distributing the labels and also the end users of the products. Those developing the labels need to better understand what is acceptable so that when they design their labels, from the beginning they can structure their designs around what is appropriate and not try to work backwards. In addition, the end users of these products need to be better educated on elements such as why it is important to read the use instructions on a label and what the implications are if they choose not to, what product categories represent, and even how to spot a quality label as opposed to just assuming everything printed on a label is accurate.

At NSF, we have worked hard to maintain our reputation as the most trusted brand in food safety and we take misuse of the NSF mark very seriously. To address this issue, NSF has an established process for investigating companies that misuse the NSF Mark. If you see the NSF Mark being used incorrectly, please complete an investigation form and provide an image or photograph clearly showing the Mark, company name and product trade name at: http://www.nsf.org/regulatory/pdf/investigation_form.pdf and e-mail your completed form and any photographs to: nonfood@nsf.org. NSF will investigate the complaint for validity and will notify the individual registering the complaint on the outcome.

As REACH continues to impact the food industry in the EU and FSMA in the US, monitoring regulations can be challenging from all aspects of food safety and food product development. Labelling may only seem to be a small part of the process but the impact that improper labelling can have on a product, production, a company and even an industry can be tremendous from many different angles. The more we can educate lubricant users and manufacturers on what to be on the lookout for and what is suitable, the more positive impact we will have on global food safety.

About the Author
Ashlee Breitner is Business Unit Manager of the NSF Nonfood Compounds Registration program. Ashlee has worked at NSF International for five years serving in positions with NSF International, including Group Leader for the NSF Consumer Products program. Her expertise in the NSF certification process enriches the Nonfood Compounds Registration program and continues NSF’s mission to deliver a program that provides product manufacturers, food producers and regulatory/inspector groups with a proven method to determine product acceptability.

Ashlee oversees all aspects of NSF’s Nonfood Compounds Registration program. She leads the Nonfood Compounds team in developing new service offerings, improving existing processes, enhancing their customer service skills and representing NSF International at industry events and conferences. Ashlee also works closely with NSF Registered companies and regulators, assuring that the NSF Nonfood Compounds Registration program continues to utilise the most up-to-date regulatory requirements and industry best practices.