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POTREBA I MOGUĆNOSTI CERTIFIKACIJE MAZIVA ZA PREHRAMBENU INDUSTRIJU

Sažetak

Porastom svijesti potrošača prehrambenih proizvoda jača zahtjev za stvaranjem strožeg zakonodavstva i viših higijenskih standarda proizvodnje prehrambenih proizvoda. Odgovornost u procesu proizvodnje hrane mora preuzeti sam proizvođač, ali dio odgovornosti je i na proizvođaču maziva čija maziva ne smiju štetiti ljudskom zdravlju kada dođe do tehnički neizbježnog kontakta s prehrambenim proizvodom. U tom procesu potreban je i autoritet koji će davati ne samo smjernice razvoja maziva nego i kao treća strana provoditi odobravanje i izdavanje uvjerenja o podobnosti maziva za primjenu u prehrambenoj industriji.

Rad daje pregled trenutačnih inicijativa kao i mogućnosti na području certificiranja maziva za prehrambenu industriju.

Uvod

Posljednje vrijeme svjedoci smo jačanja potrošačke svijesti, svakodnevno vidljive porastom interesa za alternativne načine prehrane i potražnje za zdravom hranom, tj. prehrambenim namirnicama kontroliranog biološkog podrijetla. U takvim okolnostima, uz prisutnu tendenciju globalnog porasta stanovništva, odnosno rasta potreba za prehrambenim proizvodima, prehrambena industrija je suočena s kontinuiranim zahtjevom provođenja visokih higijenskih standarda. Provođenje tih standarda nužno je za opstanak proizvođača prehrambenih proizvoda.

Ovi zahtjevi utječu i na proizvođače maziva koji su kao dobavljači indirektno uključeni u proces proizvodnje prehrambenih proizvoda. Stoga je potrebna određena vrsta garancije o podobnosti tih proizvoda za uporabu u prehrambenoj industriji. Najbolji način za obje strane, i za proizvođače maziva

i za proizvođače prehrambenih proizvoda, jest uključivanje treće strane, koja bi kao neutralna institucija izdavala dopuštenja o podobnosti maziva za primjenu. No, što učiniti kada ne postoji nitko tko izdaje dopuštenja za primjenu međunarodnog značaja, kao što je slučaj zadnjih nekoliko godina.

USDA prekinuo aktivnosti registriranja H1 i H2 maziva

Naime, 01. rujna 1998. Američko ministarstvo poljoprivrede (United States Department of Agriculture - USDA) prekinulo je sve svoje aktivnosti registriranja H1 i H2 maziva. H1 i H2 maziva bila su registrirana kao sastojci koji su prilikom proizvodnje prehrambenih artikala mogli doći u hranu, odnosno prilikom podmazivanja strojeva u prehrambenoj industriji doći u kontakt s hranom. Kao osnovni razlog navodi se smanjivanje troškova, tada još Clintonove administracije. Nakon toga USDA je svoje "Command and Control" aktivnosti preusmjerio na preuzimanje sigurnosnog sustava temeljenog na konceptu samoodgovornosti, poznatog pod nazivom Hazard Analysis of Critical Control Points (HACCP). Izvorno se ovaj koncept prvi put koristio u Space programima Američke svemirske agencije NASA-e šezdesetih godina za identificiranje i eliminiranje rizika kojem su se izlagale prve misije. Danas je za američku prehrambenu industriju usvajanje i provođenje ovog koncepta obveza. No, tko god je uključen u proizvodnju prehrambenih artikala, prije ili kasnije bit će suočen s ovim konceptom. HACCP koncept provode sami proizvođači prehrambenih proizvoda.

Osim ovog koncepta, USDA ostavlja proizvođačima hrane nekoliko opcija:

- koristiti proizvode sa zadnje USDA liste,
- zatražiti "Letters of Guarantee",
- zatražiti formulaciju kako bi sami odredili sigurnost proizvoda,
- osloniti se na treću stranu, neku certifikacijsku kuću.

Istovremeno budućim, odnosno potencijalnim certifikatorima ostavlja sljedeće mogućnosti:

- uvođenje programa na osnovi USDA,
- širenje tog programa s mogućnošću audita postrojenja, ocjene proizvoda i/ili certifikacije,
- iniciranje razvoja normi.

Radna skupina za maziva za prehrambenu industriju

Kao logičan odgovor na nastale poteškoće u lipnju 1999. u okrilju Europskog instituta za mazive masti (European Lubricating Grease Institute - ELGI) stvara se radna skupina s osnovnim zadatkom definiranja kvalitetnih

smjernica za registraciju H1 i H2 maziva i suradnju s potencijalnim organizacijama za registraciju. Kako je cilj ove radne skupine izrada međunarodnih normi, u radnoj skupini sudjeluju i predstavnici Američkog instituta za mazive masti (National Lubricating Grease Institute-NLGI) kao i europskog udruženja konstruktora opreme koja udovoljava strogim higijenskim standardima (European Hygienic Equipment Design Group-EHEDG). Time je stvorena radna skupina sa širokom platformom predstavnika proizvođača maziva, procesne opreme u prehrambenoj industriji, proizvođača prehrambenih proizvoda te ostalih autoriteta na području prehrane i javnog zdravstva.

Kao rezultat djelovanja radne skupine krajem 1999. godine dovršeni su proceduralni zahtjevi za registracijom maziva za prehrambenu industriju (Procedural Requirements for the Registration of Food Grade Lubricants), a objavljeni početkom 2000. godine pod oznakom FGL 1/2000/Issue 1.

Za primjenu ove procedure kao međunarodne norme prethodno je potrebno donijeti nacionalnu normu, tako da je paralelno s početkom rada Radne skupine za maziva za prehrambenu industriju (Food Grade Lubricants Working Group - FGL WG) Klüber Lubrication München KG, već iste godine zatražio izradu DIN norme. Nakon nekoliko revizija, a pozivajući se na FDA pozitivnu listu Code of Federal Regulations 21 § 178.3570, krajem rujna 2000. usvojena je norma DIN V 10517, a objavljena u travnju ove godine.

Nakon usvajanja ove norme Njemačka je podnijela zahtjev za izradu međunarodne norme (ISO Geneva). No, kako je za izradu međunarodne norme potrebno sudjelovanje barem 5 zemalja, osim Njemačke tu spremnost su izrazile Francuska, Švedska, Nizozemska i Australija. Za izradu norme i njezinog stupanja na snagu potrebno je tri godine od podnošenja zahtjeva.

Već na početku svog djelovanja Radna skupina FGL WG je riječ "certifikacija" promijenila u riječ "registracija". Uporaba riječi "certifikacija" ima konotaciju da procedura uključuje pregled proizvodnih pogona proizvođača maziva, što nikako nije namjera ove procedure.

Osim aktivnosti na području registracije maziva Radna skupina FGL WG izradila je nacrt procedure za pregled potencijalnih organizacija za registraciju maziva za prehrambenu industriju "Draft Audit Procedure" pod oznakom FGL 2/2001/Issue 1/Draft 1.

Ovaj nacrt definira zahtjeve postavljene potencijalnim organizacijama za registraciju maziva. Neki od zahtjeva su slijedeći:

- sustavna organiziranost (QA/QM System),
- kvalificirano stručno i administracijsko osoblje,

- stroga povjerljivost u rukovanju podacima,
- neovisnost o industriji maziva,
- mogućnost objave registriranih maziva na Internetu.

Također su definirani aspekti koji će biti predmetom certifikacijskog pregleda:

- odgovornost menadžmenta,
- povjerenje klijenata,
- ovladavanje dokumentima,
- interni pregled sustava kvalitete,
- identifikacija proizvoda i sljedivost,
- provjera kvalitete, mjerenje i ispitna oprema,
- skladištenje i čuvanje uzoraka.

Ovom procedurom predviđeni su osim certifikacije i recertifikacijski programi, i to svake dvije godine, naravno, na trošak budućih organizacija za registraciju maziva za prehrambenu industriju. Samu recertifikaciju izvodili bi predstavnici Radne skupine za registraciju maziva za prehrambenu industriju, s time da predstavnici EHEDG-a nisu spremni u tome sudjelovati.

Potencijalne organizacije za registraciju maziva za prehrambenu industriju

Kao najkompetentnija organizacija za registraciju maziva za prehrambenu industriju zasigurno se izdvaja National Sanitary Foundation International (NSF). Ova kuća, osnovana 1944. godine u SAD-u, djeluje na području javnog zdravlja, zaštite okoliša, osiguranja kakvoće hrane i vode za piće te certifikacije proizvoda i sustava. Prestankom rada USDA na području registracije maziva za prehrambenu industriju, preuzela je sve njezine uporabne dozvole, te ih objavila na svom Web site-u, označivši ih crnom bojom kako bi se razlikovale od NSF-registriranih proizvoda označenih plavom bojom. Preuzete uporabne dozvole, njih više od 100.000 sa zadnje liste iz srpnja 1998. godine, bit će aktivne još nekoliko godina, odnosno 5 godina od preuzimanja.

U svom radu NSF pokazuje konzistentnost s programom USDA, s obzirom na terminologiju i označavanje. Svoju proaktivnu ulogu na području registracije maziva za prehrambenu industriju dokazuje i izradom nacrtu budućeg US ANSI standarda, izrađenog pod oznakom NSF A116. On je izrađen u skladu s DIN normom V 10157 i proceduralnim zahtjevima Radne skupine za maziva za prehrambenu industriju i njegovo usvajanje se očekuje krajem ove godine. Ova organizacija je prihvaćena i priznata od mnogih institucija i autoriteta, kao i od proizvođača hrane i međunarodne zajednice.

Radna skupina FGL WG je njihov dosadašnji rad na području registracije maziva za prehrambenu industriju ocijenila kao potpuno usklađen s njihovim proceduralnim zahtjevima.

Nadalje, certifikacijska tvrtka SGS (Société Générale de Surveillance) se spominje kao jedan od kandidata za registraciju maziva za prehrambenu industriju. Osnovana 1878. godine, djeluje u preko 140 zemalja širom svijeta i predstavlja se kao najveća kuća na području testiranja, verificiranja i certificiranja. Ova organizacija je izrazila spremnost za preuzimanje registracijske zadaće.

Njemački DIN Certco i američki UL (Underwriter Laboratories) za sada nisu spremni preuzeti ulogu izdavanja dopuštenja, premda su zadnjih godina učinili značajne napore na preuzimanju uloge njihova izdavanja.

Zaključak

Aktivnosti Radne skupine za maziva za prehrambenu industriju FGL WG dovele su do stvaranja kvalitetnih podloga za izradu međunarodne norme koji će definirati zahtjeve za registracijom maziva. Djelovanje skupine posebno su potpomogli njemački predstavnici, koji su svojim radom na nacionalnoj razini stvorili uvjete za izradu međunarodne ISO norme. No, za takvu normu potrebno je čekati još dvije do tri godine.

U međuvremenu američki NSF International se utemeljio kao trenutačno najkompetentnija organizacija za registraciju maziva, čiji rad je u potpunosti usklađen sa zahtjevima Radne skupine za maziva za prehrambenu industriju.

THE NEEDS AND POSSIBILITIES OF CERTIFYING FOOD GRADE LUBRICANTS

Abstract

With the increase in awareness of the alimentary products consumers, increases also the demand for elaborating more stringent legislation and higher hygienic alimentary products production standards. The responsibility in the food production chain has to rely on the manufacturer himself, although a part of the responsibility regards also the lubricant manufacturer whose lubricants must not harm human health when the technically inevitable contact with the alimentary product occurs.

This process requires also an authority who will be not only providing lubricant development guidelines, but also, as a third party, implementing the authorization and issuing of certificates on lubricant suitability for alimentary industry application.

Introduction

Recently, we have witnessed consumer awareness increase, visible daily in the increase of interest in alternative diet patterns and health food i.e. controlled biological origin alimentary products demand. Under such circumstances, with the global population increase i.e. alimentary products needs growth tendency, the alimentary industry is faced with a continuous requirement for implementing high biological standards. The implementation of these standards is necessary for the survival of alimentary products manufacturers.

These requirements influence also lubricant manufacturers, who, as suppliers, are indirectly involved in the alimentary products production process. That is why a kind of warranty is needed on these products' suitability for use in alimentary industry. The best way for both sides (lubricant manufacturers and alimentary products manufacturers) is to include a third party, which would, in the capacity of a neutral institution, be issuing permits on the suitability of lubricants for application. However, what is to be

done when there is no one who would be issuing application permits of international significance, such as has been the case in the past few years?

USDA Stops Activities of Registering H1 and H2 Lubricants

Namely, on 1 September, 1998, the United States Department of Agriculture – USDA ceased all its activities of registering H1 and H2 lubricants. The basic reason stated was the cutting of expenses (back then it was still president Clinton's administration). After that, USDA has redirectioned its Command & Control activities towards the taking over of a safety system based on the self-responsibility concept, known under the name of Hazard Analysis of Critical Control Points (HACCP). This concept was originally used for the first time in Space programmes of the American NASA space agency in the 60's, for the assessment and elimination of risk faced by the first missions. Today, the adoption and implementation of this concept is a must for the American alimentary industry. However, whoever is involved in the production of alimentary products shall sooner or later be faced with this particular concept. The HACCP concept is being implemented by the alimentary products manufacturers themselves.

Apart from this particular concept, USDA leaves several options to food manufacturers:

- using products from the final USDA list,
- requiring Letters of Guarantee,
- requiring formulations in order to identify product safety on their own
- relying on a third party – a certifying company.

At the same time, it leaves the future i.e. potential certifiers the following possibilities:

- introducing a USDA-based programme,
- spreading the programme, with the possibility of plant auditing, product evaluation, and/or certification,
- initiating standard development.

Food Grade Lubricants Working Group

As a logical answer to the difficulties arising in June 1999, in the scope of the European Lubricating Grease Institute – ELGI), a Working Group has been created with the basic task of defining good quality guidelines for registering H1 and H2 lubricants and co-operating with possible certification organizations. Since the purpose of this Working Group is the elaboration of an international standard, the Working Group also features the representatives

of the National Lubricating Grease Institute – NLGI), as well as the European Hygienic Equipment Design Group – EHEDG). This has created a Working Group with a broad platform of representatives of lubricant manufacturers, alimentary industry process equipment manufacturers, alimentary products manufacturers, and other authorities in the area of food industry and public health.

As a result of the Working Groups's activities, towards the end of 1999, Procedural Requirements for the Registration of Food grade Lubricants have been completed and published towards the beginning of 2000 under the mark of FGL 1/2000/Issue 1. For the application of this procedure as an international standard, one must first pass a national standard, so that – parallely with the beginning of activities of the Food Grade Lubricants Working Group – FGL WG), Klüber Lubrication München KG that very same year requested the elaboration of a DIN standard. After a few audits, and relying upon the FDA positive list Code of Federal Regulations 21 par. 178 3570, towards the end of September, 2000, the DIN V 10517 standard was adopted, published in April 2001.

After the adoption of this standard, Germany has filed a request for the elaboration of an international standard (ISO Geneva). However, since the elaboration of an international standard requires the participation of at least 5 countries, aside from Germany, their willingness to do so was expressed also by France, Sweden, The Netherlands and Australia. The elaboration of the standard and its coming into force requires three years from the submitting of the request.

Already at the very beginning of its activities, the FGL WG has changed the word “certification” into “registration”. The use of the word “certification” implies that the procedure includes an inspection of the lubricant manufacturer's production plants, which is by no means the intent of this procedure.

Aside from activities in the field of lubricant registration, the FGL WG has elaborated a draft procedure for the inspection of possible organizations for food grade lubricant registration “Draft Audit Procedure”, under the mark of FGL 2/2001/Issue 1/Draft 1.

The said Procedure identifies requirements from the possible lubrication registration organizations. Some of the requirements are as follows:

- systematic organization (QA/QM System),
- qualified expert and administrative personnel,

- strict discretion in handling information,
- independence from the lubricant industry,
- the possibility of publishing registered lubricants on Internet.

Also, the aspects have been defined appearing as the object of the certification inspection:

- managerial responsibility,
- clients' confidence,
- handling of the documents,
- internal Quality Assurance audits,
- product identification and follow up,
- control, measurement and test equipment,
- sample storage and keeping.

This procedure implies, apart from certification, also re-certification programmes, each two years, of course, at the expense of the future organizations for the food grade lubricants registration. The recertification itself would be performed by the representatives of the Food Grade Lubricants Working Group, keeping in mind that the EHEDG representatives are not prepared to take part in it.

Possible Organizations for the Registration of Food Grade Lubricants

Appearing as the most competent organization for the registration of food grade lubricants is the National Sanitary Foundation International (NSF). The company, established in USA in 1944, is engaged in the areas of public health, environmental protection, food and potable water quality assurance, and certification of products and systems. When USDA stopped operating in the area of food grade lubricants registration, it has taken over all of its approvals and has published them on its web site, marking them by bold in order to distinguish them from NSF-registered products marked by blue. The approvals that were taken over – more than 100,000 of them – from the final list of July, 1998 shall remain active for a few years more i.e. 5 years upon taking over.

In its work, NSF is showing consistency with the USDA programme, in terms of terminology and labelling. Its proactive role in the area of food grade lubricant registration is proven also by the elaboration of the draft of the future US ANSI standard, made under mark NSF A116. It has been elaborated in compliance with the DIN standard V 10157 and procedural requirements of the Food Grade Lubricants Working Group, and its adoption

is due towards the end of this year. The organization has been accepted and recognized by many institutions and authorities, as well as by food manufacturers and the international community. The FGL WG has evaluated its so far work in the area of food grade lubricants registration as being entirely in compliance with their procedural requirements.

Furtherly, the SGS (Société Générale de Surveillance) certification company is mentioned as one among the candidates for registering food grade lubricants. Established in 1878, it is now operating in over 140 countries around the world, appearing as the largest company in the area of testing, verification and certification. The organization is prepared to take over the task of registration.

The German DIN Certco and the American UL (Underwriter Laboratories) are for the time being not ready to take over the role of issuing permits, although they have made considerable efforts in the past few years to take over the role of their issuing.

Conclusion

The FGL WG (Food Grade Lubricants Working Group) activities have led to the creation of good quality support for the elaboration of an international standard that will define requirements for lubricant registration. The Group's activities were especially backed by the German representatives who have, by their work on the national level, created conditions for the elaboration of an international ISO standard. However, the making this particular standard requires another two to three years.

In the meantime, the American NSF International has been established as for the time being the most competent lubricant registration organization, entirely in compliance with the requirements of the Food Grade Lubricants Working Group.

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