REACh and its impact on footwear and leather good industries

Thierry PONCET [*], **Régis LETY** [*]

CTC, 4, rue Hermann FRENKEL 69367 Lyon cedex 07 France

Abstract: Being an international association, it is the duty of the IULTCS to inform its member of relevant evolution in legislation and market demand around the world. Published in December 2006, REACh is now almost fully implemented with the end of the pre-registration period in November 2008 and with the publication of the Official List of Substances of Very High Concern (annex XIV) in June 2008. The objective of this presentation is to show the incidences of Reach on the leather sectors. What are the substances of Very High Concern? Would it be possible to find these substances in Leather? In other materials used in the footwear industry: PVC, polyurethane, textile such as cotton or linen, thermoplastic rubber, latex, …. What are the possible concentrations? Are these concentrations above or bellow the 0.1% threshold. In addition to the substances of very high concern, there are also some restrictions on chemical that were implemented before REACh and that have been included into that regulation. This has also to be taken into account when exporting articles to European countries. Voluntary approach linked to labels, brand specification, specification for or Personal Protective Equipement is an added source of confusion when dealing with specification. The objective of that presentation is to make it clear and to focus on the main priorities for the leather, footwear and leathergood industries.

Key words: reach; substances of Very High Concern; leather; footwear; leathergoods

1 Introduction

The aim of this poster is to explain the obligations of companies outside Europe included in the scope of REACh and to suggest the action plans.

REACh is a European regulation on managing the marketing of chemical substances. It came into force in June 2007 but includes several phases scheduled until 2020.

One of the major aspects of REACh applies to a category of substances considered to be "of very high concern", for which the regulation has developed a special procedure: “Authorisation”.

A substance of very high concern is by definition a substance whose effects on people and the environment are extremely harmful (carcinogenic, mutagenic, reprotoxic, bioaccumulative). With the implementation of REACh, the European Union wishes the use of this type of substance to be eventually as limited and as controlled as possible. For this type of substance REACh therefore imposes the following procedures:

> All European manufacturers or importers of “articles” must inform their clients whether the raw materials (leather, textiles, plastic polymers, etc.) or manufactured products they sell contain any substances of very high concern listed in Annex XIV of the regulation at a concentration higher than 0.1 wt % (1g/kg).

> Any European consumer may ask companies that market manufactured products whether the articles

[*] Corresponding author. Phone: 0033 (0) 472761000. Fax: 0033 (0) 472761005. E-mail: tponcet@ctcgroupe.com; rlety@ctcgroupe.com

PDF 文件使用 "pdfFactory Pro" 试用版本创建 www.fineprint.com.cn

in question contain substances of very high concern listed in Annex XIV of the regulation at a concentration higher than 0.1 wt % (1g/kg).

Marketing authorities take this aspect very seriously. The RIP (REACh Implementation Project) guidance document 3.8 (May 2008 version) concerning articles stipulates that these conditions on the supply of information are to be applied when the first "candidate list" of substances of very high concern is published (late 2008).

Another aspect of the REACh regulation is the setting up of Restrictions. The "administrative" threshold of 0.1 wt % (1 g/kg) that compels companies to provide information on substances does not imply that the current or future limits in force on articles may no longer apply. Take the example of aromatic amines that are regulated in the European Union: the authorised threshold for marketing will remain 30 mg/kg (detection limit) and the European Directive prohibiting aromatic amines is now included in REACh.

If it becomes apparent that a substance may have damaging effects on consumers' health or the environment at the end of an article's life, the REACh regulation will therefore impose restrictions with thresholds much lower than 0.1%.

2 What substance to look for in articles

The manufacturing industry will have to rule on whether it is forced to provide information on the presence of substances of very high concern in materials or finished, manufactured or imported products.

To comply with REACh, one has to determine whether the materials produced contain substances of very high concern listed in Annex XIV of the regulation at a concentration of > 1g/kg.

- Identify the substances of very high concern used in the production process.
- Evaluate their concentration in the substance produced.

Not all substances that meet the criteria "of very high concern", i.e. several thousand, will be included in the list. The various countries in the European Union will suggest which substances are to be included.

A "candidate list" of substances was published in 2008. There is an obligation to provide information to its clients.

In June 2011, an official version called the "black list" will be published.

The actual candidate list of substances of very high concern fort authorisation contains the following substances:

4,4'- Diaminodiphenylmethane
(MDA)
Dibutyl phthalate
(DBP)
Bis (2-ethylhexyl)phthalate
(DEHP)
Benzyl butyl phthalate (BBP)
Cobalt dichloride
Diarsenic pentaoxide
Diarsenic trioxide
Lead hydrogen arsenate

PDF 文件使用 "pdfFactory Pro" 试用版本创建 www.fineprint.com.cn

Triethyl arsenate
Sodium dichromate
Bis(tributyltin)oxide
(TBTO)
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)
Anthracène
Hexabromocyclododecane (HBCDD)
5-ter-butyl-2,4,6-trinitro-m-xylene (musk xylene)

Some of these substances might be present in materials used in the footwear or leathergood industry.

Phtalates are well known to be used as plasticisers in PVC soles, PVC patchs or coated leather. Concentration might reach 40% in some PVC. It is also possible to find some phthalates in others plastics such as polyurethanes, rubber, EVA or TR. Concentration would then be lower.

Other chemicals might be detected in footwear or leathergood articles. Chloroalkanes or chromium VI in leather, HBCDD in textiles, anthracene in plastics containing recycled material, arsenics in natural fibres, lead in some pigments.

In addition to these substances, there are also some restrictions on chemical that were implemented before REACh and that have been included into that regulation (directive 76/769). This has also to be taken into account when exporting articles to European countries. Aryl amines for material in direct skin contact are an example of restriction included in that directive. More recently, organostanninc compounds were also been restricted.

Voluntary approach linked to labels, brand specification, specification for or Personal Protective Equipments is an added source of confusion when dealing with specification.

PDF 文件使用 "pdfFactory Pro" 试用版本创建 www.fineprint.com.cn