# TECHNICAL REPORT

# **CEN/TR 15441**

# RAPPORT TECHNIQUE

# TECHNISCHER BERICHT

October 2006

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## **English Version**

# Solid recovered fuels - Guidelines on occupational health aspects

Combustibles solides de récupération - Lignes directrices relatives à la santé au travail

Feste Sekundärbrennstoffe - Leitlinien über berufsbezogene Gesundheitsaspekte

This Technical Report was approved by CEN on 13 May 2006. It has been drawn up by the Technical Committee CEN/TC 343.

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Management Centre: rue de Stassart, 36 B-1050 Brussels

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# **Foreword**

This document (CEN/TR 15441:2006) has been prepared by Technical Committee CEN/TC 343 "Solid recovered fuels", the secretariat of which is held by SFS.

This informative Technical Report was prepared by CEN/TC 343 Solid recovered fuel, working group 3 at. provic. Jifferent g standard. Sampling, sample reduction and supplementary methods. It was produced under the Mandate M/325 to CEN on solid recovered fuels to provide the European Commission with a report on aspects of occupational safety and health regarding the different stages of SRF production and use in order to decide whether there is a need to develop a referring standard.

# Introduction

Production, handling, storage, trade, sampling or analysis of SRF can be accompanied with certain health risks, not only by hazardous chemical products, but by biological agents, too. In addition, the risk of concomitance of hazardous waste in the input material cannot be excluded. These risks will be described in this Technical Report.

The safety data sheet (SDS) for chemical products due to ISO 11014-1 is a means of transferring essential hazard information (including information on transport, handling, storage and emergency actions) from the supplier of a chemical product to the recipient of this product. For non-hazardous substances or products there is a gap in information duties. Solid recovered fuels are derived from non-hazardous types of waste, so ep. ssint prima facie there seems to be no need for preparing a SDS for SRF. In addition, the SDS due to ISO 11014-1 would not cover environmental or health risks in the stage of SRF production.

# 1 Scope

This Technical Report considers aspects of occupational safety and health within the scope of CEN/TC 343: production and trade of solid recovered fuels.

#### 2 Normative references

Not applicable

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

## actinomycete

 $0.5~\mu m$  to  $1.5~\mu m$  long, gram-positive, rod-shaped bacteria that form long threads; their cells are also called "spores"

#### 3.2

### bacteria (sing. bacterium)

simple prokaryotic micro-organism, mainly formed as balls or straight, curved or curled rods, with a width less than 1  $\mu$ m and a length of 1  $\mu$ m to 5  $\mu$ m, some of them forming endospores to resist adverse environmental conditions like UV radiation, heat, dryness and chemical disinfectants

#### 3.3

# biological agent

micro-organisms, including those which have been genetically modified, cell cultures and human endoparasites, which may be able to provoke any infection, allergy or toxicity

#### 3.4

#### colony forming unit (CFU)

descendants of a single or of several agglutinated micro-organisms growing on a solid culture medium showing a typical appearance in colony form and often in colony colour, too

#### 3.5

## dust

solid particles dispersed into the air

#### 3.6

#### endotoxin

degradation product of gram-negative bacteria

#### 3.7

#### endotoxin unit (EU)

endotoxin activity; 1 ng endotoxin corresponds to 2 EU - 50 EU, in dependence on the reference standard

#### 3.8

#### exogenic-allergic alveolitis (EAA)

allergic reaction to exposure especially to thermoactinomycetes, can become chronic or fatal; also known as farmer's lung

#### 3.9

## exposure risk

risk of exposure to biological agents, chemical substances or other risk factors like heavy metals, dust or fire