



BUSINESS PLAN

ISO/TC 54 Essential oils

EXECUTIVE SUMMARY

Standardization in the ISO/TC 54 consists of methods of analysis and specifications for essential oils, that includes: development of specific monographs for quality standardization of every essential oil; standardization of analytical methods to control essential oils quality; requirements for transport, labelling and marking; nomenclature, botanical names, etc., and revision work.

Nowadays, there are 18 participant-members and 30 observer-members. They represent a great part of the main producers, suppliers and consumers of the essential oils industry worldwide. This guarantees that the work developed within the ISO/TC 54 represents the experience, test methods and techniques used around the world.

Due to globalisation of the market, standards become more and more important to facilitate world trade. The Standardization of the essential oils sector has helped to determine which oils are mostly used in the cosmetic and the perfume world, and to establish some quality levels for them. This Standardisation process is growing in importance due to the new technologies and globalisation process of the market.

Likewise, the ISO/TC 54 acts as a central point that unifies and manages the knowledge and information and is a source for references for all its members.

The committee aims to give the best possible service for its members, the best profits for the sector and to follow the line of standardisation that up to now we have been undertaking, adding to our work all the items of interest for the members.

1 INTRODUCTION

1.1 ISO technical committees and business planning

The extension of formal business planning to ISO Technical Committees (ISO/TCs) is an important measure which forms part of a major review of business. The aim is to align the ISO work programme with expressed business environment needs and trends and to allow ISO/TCs to prioritize among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development.

1.2 International standardization and the role of ISO

The foremost aim of international standardization is to facilitate the exchange of goods and services through the elimination of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards: [ISO](#) (International Organization for Standardization) is responsible for all sectors excluding Electrotechnical, which is the responsibility of [IEC](#) (International Electrotechnical Committee), and most of the Telecommunications Technologies, which are largely the responsibility of [ITU](#) (International Telecommunication Union).

ISO is a legal association, the members of which are the National Standards Bodies (NSBs) of some 164 countries (organizations representing social and economic interests at the international level), supported by a Central Secretariat based in Geneva, Switzerland.

The principal deliverable of ISO is the [International Standard](#).

An International Standard embodies the essential principles of global openness and transparency, consensus and technical coherence. These are safeguarded through its development in an ISO Technical Committee (ISO/TC), representative of all interested parties, supported by a public comment phase (the ISO Technical Enquiry). ISO and its [Technical Committees](#) are also able to offer the ISO Technical Specification (ISO/TS), the ISO Public Available Specification (ISO/PAS) and the ISO Technical Report (ISO/TR) as solutions to market needs. These ISO products represent lower levels of consensus and have therefore not the same status as an International Standard.

ISO offers also the International Workshop Agreement (IWA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the IWA is developed by ISO workshops and fora, comprising only participants with direct interest, and so it is not accorded the status of an International Standard.

2 BUSINESS ENVIRONMENT OF THE ISO/TC 54

2.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal and social dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this ISO/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

The economic and industrial environment in the essential oils field is changing throughout the years. Globalisation of the markets, dropping of some trade barriers, expansion of big companies and specialisation of little ones, give us a different picture of the world trade than before. At the same time, economic, environmental and quality requirements are growing more and more, forcing conditions onto the production and commercialisation of essential oils.

In this respect, ISO/TC 54 contributes greatly, by developing International Standardization of methods of analysis and specifications, to facilitate trade and commercial exchanges in the essential oils sector, as the above mentioned globalisation has involved a growing demand of International standards on essential oils (either by elaborating new standards or revising the existing ones to update them), including:

- Elaboration of specific monographs for quality standardization of every essential oil.
- Standardization of analytical methods to control essential oils quality.
- Standardization of requirements for transport, labelling and marking of essential oils.
- Standardization of the botanical names of plants used for the production of the essential oils.

The current approach agreed by the ISO/TC 54 for the establishment of quality specifications for essential oils is based on the establishment of the physical, chemical and organoleptic characteristics, as well as the chromatographic profile of the essential oil, that indicates the proportions of the representative and characteristic components identified in the chromatogram of the analysis by gas chromatography of the essential oil.

One of the major changes related to the products addressed under the scope of the ISO/TC 54 is the higher involvement of the essential oils in the alternative medicine in Europe and the US. Other expected changes and major innovations in the disciplines or practices addressed by the scope of the ISO committee is the improvement of qualities on the market.

The categories of relevant stakeholders addressed by the scope of the ISO/TC 54 are industry, consumer protection, producers, dealers and customers and the concerns and perceptions of these relevant stakeholders are the protection of the consumer and the relevance of active properties of essential oils.

The ISO/TC 54 has taken into account the cosmetic regulations, the European pharmacopoeia and the aromatherapy as social, safety, health, environmental or cultural issues related to the sector, products, materials, disciplines or practices addressed by the scope of the ISO/TC 54.

2.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the ISO/TC 54:

A worldwide estimation of production of essential oils is a very hard task because of the huge number of small farmers for many of the products and the complexity of (local/domestic) existing supply chains, always considering second or third hand information, extrapolations, guesses and estimates etc., thus, there are "guestimates" with a margin of deviation +/- 25 %. Taking all this into consideration, and according to information provided by IFEAT, data obtained in 2018 from different sources indicates a world production of 150.000 – 175.000 tonnes resulting in 2.750.000 – 3.250.000 MUSD, highlighting the following essential oils with more production:

Table 1 –Yearly world production of the most representative essential oils

Essential oil	Tonnes
Turpentine	300.000
Orange	55.000
Cornmint	40.000
Eucalyptus	11.000
Lemon	7.500
Scotch spearmint	3.650
Peppermint	3.300
Clove leaf	2.560
Lavender	2.100
Lavandin grosso	2.100
Chinese sassafras	2.000
Lime	1.900
Litsea cubeba	1.700
Patchouli	1.600
Camphor	1.520
Citronella	1.100
Cedarwood (Chinese)	1.000
Eucalyptus citriodora	1.000
Texas cedarwood	850
Star Anise	800
Virginia cedarwood	350

Structure of the market

Essentials oils are products widely used either in food or in perfumery industries and, in a minor degree, in cosmetic and in some other fields related to health, such as pharmaceuticals, phytotherapy and aromatherapy.

Food industry consumed about 60% of the whole essential oils production, while the rest is mainly consumed in perfumery. There are about 300 commonly used essential oils in making fragrances and flavors.

3 BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC 54

Benefits expected from the work of ISO/TC 54 are:

- establish harmonized rules to facilitate trade and commercial exchanges;
- Advances in analytical methods
- clarification of botanical terminology and better understanding;

- improve communications between industry, consumers and authorities;
- promote the quality of essential oils;
- Contribute to identify an essential oil and to evaluate its quality
- improve health and safety
- consider environment requirements.

Development and implementation of International Standards in the field of essential oils will eliminate or reduce technical barriers to trade and provide access to the global market.

4 REPRESENTATION AND PARTICIPATION IN THE ISO/TC 54

4.1 Membership,

<https://www.iso.org/committee/48956.html?view=participation>

4.2 Analysis of the participation

Producers and consumers of essential oils, as well as research institutions and government authorities are well represented in ISO/TC 54, which presently has 19 members participating actively in the work and 29 members as Observer ones, from developed and developing countries.

5 OBJECTIVES OF THE ISO/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

5.1 Defined objectives of the ISO/TC

Based on the considerations above, ISO/TC 54 proposes the following objectives and strategic directions for its future work:

ISO/TC 54 intends to develop, saving available resources as much as possible, International Standards within the scope of the TC, in order to:

- Facilitate the essential oils world trade.
- Promote the quality of the essential oils produced and commercialised.
- Contribute to protect the health of the essential oils consumers
- Promote the safety of the products and industrial processes in essential oils field.
- Promote the application of advanced industrial technology.
Take into account the resources of each plant

5.2 Identified strategies to achieve the ISO/TC's defined objectives

ISO/TC 54 will use the following strategies to satisfy the preceding objectives:

- Set priorities and schedules in elaboration of the International Standards included in TC work programme and revision of this one at each plenary meeting, in order to withdraw or redefine those drafts on which no progress has been made between two meetings (planned every two years) and to identify items for future works.
- Nominate, for each work item, a project leader responsible for the drafting of the document and for including all of the modifications agreed by ISO/TC 54 members (during the different stages until the final publication of the IS).

- Continue liaison with:
 - IFEAT International Federation of Essential Oils and Aroma Trades
 - IFRA International Fragrance Association
 - FAO Food and Agriculture Organization of the United Nations
 - CAC Codex Alimentarius Commission
 - CE- Council Council of Europe
- Try to reach a liaison with other organisations of interest.
- Promote, as much as possible, works by correspondence and electronic means of communication, as well as using the ISO/TC Server tool.

6 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE ISO/TC WORK PROGRAMME

Risk analysis

There is only a remarkable risk factor related to the average time for the publication of International Standards containing essential oils specifications.

In this respect, although the said average time should be around three years, elaboration of above mentioned International Standards sometimes takes longer, since these specifications are in the data collected during several years of production of the corresponding essential oil.

7 STRUCTURE, CURRENT PROJECTS AND PUBLICATIONS OF THE ISO/TC

This section gives an overview of the ISO/TC's structure, scope, projects and publications.

Information on ISO online

The link below is to the TC's page on ISO's website:

<https://www.iso.org/committee/48956.html>

Reference information

[***Glossary of terms and abbreviations used in ISO/TC Business Plans***](#)

[***General information on the principles of ISO's technical work***](#)