

16/06/2020

PROJECT SWIFT – SPECIAL SESSION FINDINGS

GLOBAL SENSORY

PD Concepts

Preface

This report presents the outcome of two special sessions that have been conducted in May 2020. Special sessions are required in Sensorial queries in particular when assessing products that show off with new dimensions other than the wellknown perceptions which are already covered by a standard questionnaire, responding to all known properties of a product.

Why Special Sessions

“An overall sensory profile describes the sensory attributes of a product. A "product" is characterized by several parameters. Some of these have a single dimension (e.g. the diameter of a ball, the weight of a sachet, etc.) and others have several dimensions (e.g. the shape of a product, the texture of meat, etc.); a sensory profile requires monodimensional quantities to lead to a measurement of intensity.

Consequently, the evaluation of a complex sensory quantity needs methodology which is founded on identification of appropriate descriptors. This work is given to a trained panel who describe their perceptions both qualitatively (nature of the stimulus) and quantitatively (intensity of each stimulus). If the aim is to appreciate all the attributes, an "overall sensory profile" is built; if it concerns the evaluation of only flavour, odour, texture or appearance, a "partial sensory profile" is then elaborated. In both cases, the choice of descriptors is the preliminary phase which determines the quality of the sensory profile.

There are several ways to establish a list of descriptors, for example:

- a) leave each assessor to choose and use, for the final profile, his/her own descriptors (free-choice profile)*
- b) use descriptors common to all the members of the panel, either*
 - 1) by suggesting existing descriptors, on condition that the relevance of the descriptors for the product has been checked and that the assessors have been trained on these descriptors (generally with the help of reference products), or*
 - 2) by the creation of descriptors by all the members of the panel after individual or collective work.”*

In our case, b) 2) is the principle that has been applied.

ISO 11035:1994(en) Sensory analysis — Identification and selection of descriptors for establishing a sensory profile by a multidimensional approach.

The Descriptive Panel Location Hamburg

The descriptive panel in Hamburg is well established evaluation tool (25 years of experience). The panel in this case is dedicated to the assessment of factory made cigarettes (FMC). It consists of 17 people and is a constant group of people who have been recruited according to a screening test proving their sensitivity in all areas of human senses. The participants are regular consumers and are not a part of any ITG department.

The panel is trained to evaluate FMC according to all properties of the product category in order to respond to features that are accessible for regular consumers. They are trained to identify specific intensities of product features without having a deeper understanding about the different aspects of the product. All kinds of assessments are performed in a fully blinded way which means that our panellists have no information about brands and market origin of the products they describe. Products are described in an objective way without any questions around liking and preferences. The training itself is done by a moderator that structures the training sessions according to the purpose but always acts neutrally – which means the panel works free from leader’s influence.

(According to: DIN EN ISO 8586:2014-05 „Sensorische Analyse – Allgemeiner Leitfaden für die Auswahl, Schulung und Überprüfung ausgewählter Prüfer und Sensoriker“)

Global Sensory

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Date of report: 16/06/2020

Project: Special Session – Project Swift**Market: Slovenia, UK, Germany****Segment: KS / Special Flavours****Sessions: May 18th 2020 / May 29th 2020****Attendees: Session 1: 17 / Session 2: 15 panellists**

Background

JTI recently launched new products in various EU countries to be sold post 20 May 2020. First feedback from the markets indicate that several SKUs show a noticeable menthol impression. The aim of this research is to determine which of the new products have characterising smell or taste (menthol or other flavour distinct from tobacco).

Winston Xspression Green Slovenia was used in the first session for the simple description test. The same product together with Sovereign New Dual and Winston Green DE were part of the second session for confirming the simple description test results of session one.

This research aimed to establish whether:

- a smell or taste of menthol or other flavour distinct from tobacco could be detected?
- the flavour notes could be described in order to cross-check with our standard descriptive questionnaires?
- additional attributes would be required to assess the sensorial performance of the products?

Executive summary

Both JTI products (Winston Xspression Green SI and Sovereign New Dual UK) demonstrate noticeable menthol flavour related sensations. This includes a noticeable menthol taste and a cooling effect in the mouth. The panellists were unable to find a menthol smell impression. The panellists achieved consensus about the menthol taste impressions as well as the new defined descriptive attributes (see last page for details). Preliminary lab results show that menthol in smoke is measurable – even though on a lower level than ‘regular’ menthol products.

Winston Green DE (‘Neuer Blend’) clearly differentiates from the Slovenian / UK samples and shows no menthol sensations at all. This has since confirmed by laboratory results which indicates that there is no menthol in the blend.

The Products

Version	Winston Xspression Green	Sovereign New Dual	Winston Green ('Neuer Blend')
Name In Report	Winston Xspression Green	Sovereign New Dual	Winston Green
Session	1+2	2	2
Brand	Winston	Sovereign	Winston
Country of Sale	Slovenia (SI)	UK	Germany (DE)
Tar / Nic / CO	5 / 0.44 / 6	8.6 / 0.67 / 9.6	
Menthol in smoke (mg/Cig)	0.115*	Not available	No menthol in smoke
Menthol (cig)	Not available	1.12 mg	No menthol in cig
Filter	Mono-AC	Mono-AC	Mono-AC

* preliminary – further assessments in view of origin of measured menthol in smoke values ongoing

Methodology and initial findings

1st Session: Simple Descriptive Test (Qualitative Method)

The panellists were asked to describe cigarettes in following characteristics:

- Smell before smoking
- Taste and Mouthfeel while smoking

Group discussion after evaluation of the cigarettes

Summary - Simple Descriptive Test (Session 1)

	Winston Xpression Green Slovenia
Taste while smoking	- Sweet (13) - Menthol (14) - Fruity (11)
<i>Group Discussion</i>	Menthol Taste Consensus amongst panellists that menthol taste is noticeable
Mouthfeel while smoking	- Cooling Effect in mouth (17)
Smell before smoking	- Sweet (16) - Fruity (15) - Alcoholic (14) - Citrus / tropical (14) - Sourish (13)

2nd Session: Confirmation of first session results by using same Winston Slovenia version + additionally Sovereign New Dual for questionnaire validation

The panellists are asked to describe the cigarettes in the following characteristics:

- Smell before smoking
- Taste and Mouthfeel while smoking

Group discussion after evaluation of the cigarettes

Summary – Simple Descriptive Test Session 2 (Qualitative Method)

	Winston Xspression Green Slovenia	Sovereign New Dual
Taste while smoking	Results of first session are confirmed	Panellists confirm the same taste characteristics as per Winston Xspression Green including noticeable menthol taste
<i>Group Discussion</i>	Menthol Taste Consensus amongst panellists that menthol taste is noticeable	Intensities Consensus amongst panellists that menthol taste is higher than for Winston Xspression Green
Mouthfeel while smoking	- Cooling effect in mouth (17)	Consensus amongst panellists that cooling effect is higher than for Winston Xspression Green
<i>Group Discussion</i>	Cooling Effect Consensus amongst panellists that cooling effect is noticeable	
Smell before smoking	Results of first session are confirmed	Panellists confirm the same smell characteristics as per Winston Xspression Green

The final questionnaire for project SWIFT is shown in the attachment

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Attachment

Final questionnaire after panel alignment for project SWIFT

FRAGE_TEXT	descriptor (english)	category	questionnaire
Heu (Geruch)	hay like smell	Smell	standard
süß (Geruch)	sweetish smell	Smell	standard
Schokolade (Geruch)	chocolate smell	Smell	standard
harnig (Geruch)	ammoniac smell	Smell	standard
gelöschtes Feuer (Geruch)	put out campfire smell	Smell	standard
Menthol (Geruch)	menthol smell	Smell	standard+menthol
Spearmint (Geruch)	spearmint smell	Smell	standard+menthol
Vanille (wenig--viel)	vanila smell	Smell	standard+menthol+special for this project
Zitrus/Tropisch	citrus/tropical smell	Smell	standard+menthol+special for this project
Alkohol (wenig - viel)	alcohol smell	Smell	standard+menthol+special for this project
fruchtig (wenig - viel)	fruity smell	Smell	standard+menthol+special for this project
Karamell im Geruch (wenig-viel)	caramel smell	Smell	standard+menthol+special for this project
sauer (kaum - sehr)	sourish smell	Smell	standard+menthol+special for this project
Perforation (undeutlich - deutlich)	perforation visible	Optic/Haptic	standard
Stranghärte (weich-hart)	rod hardness	Optic/Haptic	standard
Filterfestigkeit: weich-hart	filter firmness	Optic/Haptic	standard
Impact	impact	Strength/Impact	standard
Ziehbarkeit (schwer-leicht)	ease of drawing	Strength/Impact	standard
kühler Eindruck	cooling effect	Strength/Impact	standard+menthol
heuig (Geschmack)	hay like taste	Taste	standard
holzig (Geschmack)	woody taste	Taste	standard
bitter (Geschmack)	bitter taste	Taste	standard
süß (Geschmack)	sweetish taste	Taste	standard
Menthol (wenig -- viel)	menthol taste	Taste	standard+menthol
Spearmint (wenig -- viel)	spearmint taste	Taste	standard+menthol
fruchtig (wenig - viel)	fruity taste	Taste	standard+menthol+special for this project
Irritation	irritation	Strength/Impact	standard
Abbrandgeschwindigkeit	burning speed	Optic during smoking	standard
Aschestabilität (instabil - stabil)	ash stability	Optic during smoking	standard
Gleichmäßigkeit des Abbrandes	burn-off behaviour	Optic during smoking	standard