



#### The innovatively healthy fragrance solution for your premises

It is our privilege to present Wikka Fragrance Solutions, a pure, premium and customized aromatherapy fragrance solution for corporate, retail and hospitality sectors that delivers a mental, emotional and physical boost to employees/clients/guests/buyers and encourages desired responses through the potent power of therapeutic grade essential oils.

#### WHAT IS WFS?

Wikka Fragrance Solutions (WFS) provides an innovative and electronically operated automatic diffuser that has been developed specifically for installation in central air conditioning systems so as to evenly and uniformly disperse customized therapeutic grade essential oil blends throughout your premises.

The benefits delivered by WFS include better emotional, mental and physical health for your staff, customers and guests (apart from making it attractively fragrant, of course!) As the essential oil blends are customized according to your requirements and preferences, you will receive a signature therapeutic fragrance that is totally unique and becomes as much an integral part of your premises as the layout,

the interiors or the wall art and will assimilate inconspicuously into your overall brand persona.

As fragrances are powerful sub-conscious memory triggers, even the tiniest whiff of your signature fragrance anywhere will evoke the recollection of your brand and boosts your brand equity.

For example: If you have a chain of hotels, or a string of franchise showrooms or multiple offices, these fragrances will be your unique calling card.

WFS has been developed under the personal supervision of Rupal Shabnam Tyagi, an acclaimed UK-trained aromatherapist, who will personally create the therapeutic grade aroma oil blends that will make an effective addition to your workspace after due



# LARGE MACHINE CLASSICAL PANEL

Dimension: 260\*350\*128mm• Voltage: 12V • Power: 20W

• Oil Bottle Capacity: 100ml • Net weight: 5.10kg • Consumption: 0.5ml/h - 5ml/h

Coverage: 600m<sup>2</sup> • 1800m<sup>3</sup> • 63000ft<sup>3</sup>

Price on request

consultation with you. Before we elaborate further, we request you to go through the following section to fully grasp how therapeutic grade essential oils are as different and as superior from regular synthetic commercial fragrances as 24 K gold is from brass.

## WHAT ARE THERAPEUTIC GRADE ESSENTIALS OILS?

Essential oils are often termed as 'nature's own pharmacy' and 'the life force of plants'. These are nature's inimitable formulas that can never be replicated by human hands. These can only be carefully reaped (steam distilled, generally) from the seeds, roots, bark, stems, leaves, fruit, flowers and/or branches, and then used for the good of all.

Essential oils contain compounds in precise ratios that are unique and signature non-replicable mixtures of several natural aromatic and medicinal compounds (terpenes, esters, oxides, alcohols, phenols, ketones, and aldehydes) specific to particular plant species. These compounds are the secret of a plant's healing powers and form the foundation of the millennia old healthcare system known as Aromatherapy. Essential oils of different plants have different health properties and it takes a trained and experienced aroma therapist (like Rupal Tyagi) to formulate a blend that meets your needs with precision.

The difference between essential oils and therapeutic grade essential oils is that therapeutic grade essential oils are those of the highest purity and thus most effective for high-quality use. We deal with only therapeutic grade essential oil blends.

#### HOW DO ESSENTIAL OILS WORK?

Essential oils are made up of minute medicinal molecules that are absorbed through inhalation. These molecules interact with the body's internal organ systems and, depending on the specific essential oil, can stimulate the immune system, aid cell growth, help eliminate toxins, kill bacteria and viruses, and so on. When inhaled through WFS dispersion, these molecules travel through the olfactory bulb route to positively and deeply affect the brain-aligned limbic system, a part of the nervous system often referred to as the emotional brain, to create desired responses like better moods, more concentration, and relaxation. As these natural molecules are inherently anti-bacterial, anti- viral and anti-fungal agents so they also create a cleaner and greener environment.



# MEDIUM MACHINE CLASSICAL PANEL

Dimension: 230\*300\*90 mm• Voltage: 12V • Power: 15W

• Oil Bottle Capacity: 500ml • Net weight: 3.85kg • Consumption: 0.3ml/h - 2ml/h

Coverage: 200m² • 600m³ • 21000ft³

Price on request

#### ESSENTIAL OILS AND HYDROCARBONS

### THERAPEUTIC BENEFITS OF ESSENTIAL OILs

The feeding with aromatic herbs, spices and some dietary supplements can supply the body with essential oils. There are a lot of specific dietary sources of essential oils, such as example orange and citrus peel, caraway, dill; cherry, spearmint, caraway, spearmint, black pepper and lemongrass. Thus, human exposure to essential oils through the diet or environment is widespread. In most cases. essential oils can be absorbed from the food matrix or as pure products and cross the blood brain barrier easily. This later property is due to the lipophilic character of volatile compounds and their small size. The action of essential oils begins by entering the human body via three possible different ways including direct absorption through inhalation, ingestion or diffusion through the skin tissue.

### ABSORPTION THROUGH THE SKIN

Essential oil compounds are fat soluble, and thus they have the ability to permeate the membranes of the skin before being captured by the microcirculation and drained into the systemic circulation, which reaches all targets organs (Adorjan & Buchbauer, 2010; Baser & Buchbauer, 2010).

#### **INHALATION**

Another way by which essential oils enter the body is inhalation. Due to their volatility, they can be inhaled easily through the respiratory tract and lungs, which can distribute them into the bloodstream (Margaris et al., 1982; Moss et al, 2003). In general, the respiratory tract offers the most rapid way of entry followed by the dermal pathway.

- 7. Classes of essential oil compounds and their biological activities
- 7.1 Hydrocarbons
- 7. Classes of essential oil compounds and their biological activities
- 7.1 Hydrocarbons Classes of essential oil compounds and their biological activities

#### **HYDROCARBONS**

The majority of essential oils fall into this category; these contain molecules of hydrogen and carbon only and are classified into terpenes (monoterpenes: C10, sesquiterpenes: C15, and diterpenes: C20). These hydrocarbons may be acyclic, alicyclic (monocyclic, bicyclic or tricyclic) or aromatic. Limonene, myrcene, p-menthane,  $\alpha$ -pinene,  $\beta$ -pinene,  $\alpha$ -sabinene, p-cymene, myrcene,  $\alpha$ -phellandrene, thujane, fenchane, farnesene, azulene, cadinene and sabinene are some examples of this family of products. These compounds have been associated with various therapeutic activities (Table 2). Some structures of these compounds are given in figure 2.

Class of compounds	Example	Bioactivities	Literature
Hydrocarbons	Limonene, myrcene, pinene, pinene, sabinene, cymene, myrcene, phellandrene.	Stimulant, antiviral, antitumour, decongestant, antibacterial, hepatoprotective	Ozbek, 2003; Pengelly, 2004; Bowles, 2003; Svoboda & Hampson, 1999; Deans et al., 1992; Griffin et al., 1999; Edris, 2007; Baser & Buchbauer, 2010
Esters	linalyl acetate, geraniol acetate, eugenol acetate, bornyl acetate	spasmolytic, sedative, antifungal, anaesthetic, anti- inflammatory.	Pengelly, 2004; De Sousa et al., 2011; Sugawara et al., 1998; Peana et al., 2002; Ghelardini et al., 1999; De Sousa, 2011.
Oxides	bisabolone oxide, linalool oxide, sclareol oxide, ascaridole	anti-inflammatory, Expectorant, stimulant	Pengelly, 2004; Ghelardini et al., 2001; De Sousa, 2011.
Lactones	nepetalactone, bergaptene, costuslactone, dihydronepetalactone, alantrolactone.	Antimicrobial; antiviral; Antipyretic, sedative, hypotensive; analgesic	Pengelly, 2004; De Sousa, 2011; Miceli et al., 2005; Gomes et al., 2009.
Alcohols	linalol, menthol, borneol, santalol, nerol, citronellol, geraniol	Antimicrobial, antiseptic, tonifying, balancing, spasmolytic, anaesthetic; anti- inflammatory.	Pengelly, 2004; Sugawara et al., 1998; De Sousa, 2011; Ghelardini et al., 1999; Peana et al., 2002.
Phenols	thymol, eugenol, carvacrol, chavicol	antimicrobial,spasmo lytic, anaesthetic, irritant, immune stimulating	Pengelly, 2004; Ghelardini et al., 1999; De Sousa, 2011.
Aldehydes	citral, myrtenal, cuminaldehyde, citronellal, cinnamaldehyde, benzaldehyde	Antiviral, antimicrobial, tonic, vasodilators, hypotensive, calming, antipyretic, sedative, spasmolytic	Dorman & Deans, 2000; Pengelly, 2004;
Ketones	carvone, menthone, pulegone, fenchone, camphor, thujone, verbenone	mucolytic, cell regenerating, sedative, antiviral, neurotoxic, analgesic, digestive, spasmolytic	Pengelly, 2004; De Sousa et al. 2008; De Sousa, 2011; Gali- Muhtassib et al., 2000

Table 2. Different classes of essential oils compounds and their bioactivities.

#### References:

The Therapeutic Benefits of Essential Oils Abdelouaheb Djilani1 and Amadou Dicko2 1LSBO, BADJI MOKHTAR-Annaba University, 2LCME, Metz University, 1Algeria 2France

#### FRAGRANCE AND TOXICITY

## WHAT ARE THE DIFFERENT TYPES OF VOC'S?

#### Natural VOC's:

They are naturally a part of life on earth and have always been here. The gaseous emissions, where these natural VOC's arise from vegetation, by deciduous trees ( isoprene's) and conifer (terpene's) or emanating from the degradation of organic matter by bacteria, (for example in swamps but also in the stomachs of animals!). The biodegradation produces in particular methane and carbon dioxide.

There are still other origins of VOC's such as your own expiration (carbon dioxide) or a flowers perfume. Our planet has always adapted well to these natural VOC's.

#### Human-made or Anthropogenic V.O.C.

They are caused directly or indirectly as a result of human activity. Every process which involves the manipulation and the production of hydrocarbons emit's VOC's. For example oil refining, solvent release, painting and industrial combustion are some of the many anthropogenic processes that produce VOC's

Simply put, natural VOC's are critical to a balanced natural healthy environment. Without them the World as we know it would not exist.

Natural VOC's enable us to smell the flowers and enjoy the aroma of a good coffee!

Anthropogenic VOC's are in the paint on the walls, in the Sofa, carpet and the exhaust fumes in the Garage, these are the VOC's concern to our Health.

- Keep exposure to emissions from products containing methylene chloride to a minimum.
- Keep exposure to benzene to a minimum.
- Keep exposure to perchloroethylene emissions from newly dry-cleaned materials to a minimum.
- Keep exposure to formaldehyde to a minimum.

#### Sources:

- 1) http://www.health.state.mn.us/divs/eh/indoorair/voc/
- 2) https://www.epa.gov/indoor-air-quality-iag/volatile-organic-compounds-impact-indoor-air-quality
- 3) https://iaqscience.lbl.gov/voc-summary



# SMART/MICRO MACHINE CLASSICAL PANEL

Dimension: 146\*156\*58mm• Voltage: 12V • Power : 5V 2Amp DC Charger or D2 Battery (1x1.5V)

• Oil Bottle Capacity: 100ml • Net weight: 450g • Consumption: 0.5ml/h - 5ml/h

Coverage: 100m3
Price on request

## THE KEY BENEFITS WFS BRINGS YOUR BUSINESS:

- A unique and innovative concept
- Available in Wall mount and HVAC connected versions
- · Creates an aura of luxury
- Provides fragrant and healthy (microbe-free) environment
- · Boosts brand recall/brand equity
- De-stresses and relaxes
- Improves productivity and efficiency in offices by:
  - Reducing sick days
  - · Reducing stress and anxiety
  - Promoting mental alertness
  - Promotes sales in retail/ food and beverage/ hospitality segments
- · Guaranteed purest, therapeutic grade oils
- Customized and created by an aromatherapy expert of royal lineage







