

*// **OCTADECANOIC ACID (STEARIC ACID)** is a white solid substance with mild odour that is insoluble with water and therefore buoyant. It is non-toxic and biocompatible with the human body, and found in human, animal, and plant adipose or fatty tissue. Its etymology comes from the ancient Greek 'stéar' which signifies 'tallow' (a substance used in the production of candles and soap, and often smeared to the underside of a boat to protect hulls from wear and marine growth. Stearic acid is also used in the production of butter and detergents, and found in human sebum (fat producing cells).*

*// **ACETIC ACID** is a colourless liquid with a sharp pungent odour that is used in the production of synthetic fibres, textile dyes, pesticides, wood glue, rubber and plastic. It is also used as a fungicide, herbicide and microbiocide in cleaning agents, and may enter ecosystems through industrial, agricultural and domestic discharge. This biochemical is naturally occurring in the human body and supports metabolic production.*

*// **PROPIONIC ACID (PA)** is a colourless liquid with a foul odour that is biologically produced through microbial processes in human and non-human intestinal tracts. Propionic acid is also found in the sudoriferous glands of humans which allow for perspiration and account for its bacterial smell. It is also used as an antifungal and is present in human foods, such as dairy, as well as in animal feed. Propionic acid is also used in the production of polymers and pesticides.*

*// **GLYCERIN (GLYCEROL)** is a colourless to brown liquid that is almost odourless and occurs in animal and plant sources such as soybean and palm oil. It is a viscous, nontoxic and hygroscopic substance with osmotic functions that can be used as a solvent, detergent, and metabolite (in human and nonhuman bodies; i.e. algal, yeast). Glycerin is also used in the production of paper, soap, alkyd resins, polyester, foam, cellophane, fuel, toothpaste.*

*// **HEXADECENOIC ACID (PALMATIC ACID)** is a white to yellow solid that is almost odourless and tasteless. It has a silken consistency and is insoluble in water. It is a naturally occurring fatty acid which is found in microorganisms, plants and animals (i.e. palm kernels, beeswax, butter and milk). It is also used to produce oil, additives, soap, polymers and moisturisers, as well as textile ink and leather goods.*

*// **N-HEXADECENOIC ACID (PALMATIC ACID)** is a white to yellow crystalline solid that is almost odourless and tasteless. It has a silken consistency and is insoluble in water. It is a naturally occurring fatty acid which is found in microorganisms, plants and animals (i.e. palm kernels, beeswax, butter and milk, but also tea and lemon balm making it a potential biomarker for human consumption). It is also found in human cells, tissue and biofluids such as urine,*

faeces, sweat and cerebrospinal fluids from the brain and spinal cord. It is a potentially harmful compound.

*// **1-OCTADECANOL (STEARYL ALCOHOL)** is a colourless to white waxy and granular solid that has a mild odour and bland taste. It is an organic substance that is used in the manufacture of paper and pulp products, and is insoluble in water. It is used in the production of soap, cleaning and adhesive agents, textile oils, alkyd resins, petroleum manufacturing, concrete and construction materials, and has been found in wastewater from paper and plastics industries. It is also present in human adipose tissue from the brain, skin, mouth and skeletal muscles, and when combusted produces unpleasant fumes.*

*// **SQUALENE** is a yellow translucent liquid that can occur in crystalline form. It has a mild odour and is insoluble in water. It is a naturally occurring biochemical found in human, animal and plant oils including amaranth seed, rice bran, wheat germ, and olives. It is a primary component of human sebum, adipose tissue, and fats produced in skin.*

*// **16-HEPTACONTANONE (PALMITONE)** is a white opaque solid substance that is found in herbs and spices. It is a constituent of *piper nigrum* (black pepper). It is a hydrophobic molecule that is almost insoluble in water.*

*// **18-HEPTACONTANONE** is an off-white waxy solid that is completely insoluble in water. It is used in soap, cleaning products, laundry detergents, antiblocking agents, and lubricants for plastics.*