



The Vape
category

What is a vape or e-cigarette?

- A vape or e-cigarette is a device, normally lithium ion, that heats a liquid to form an aerosol, which is inhaled.
- The liquid is made up of a Propylene Glycol (PG) and Vegetable Glycerine (VG) with nicotine and flavouring added. Vaping products exist on the market with no nicotine added.
- Vape products also come prefilled by the manufacture (closed systems) or with the ability for the consumer to add their own liquid (Juice) (open systems).



E-pipe



E-cigar



Large-size
tank devices



Medium-size
tank devices



Rechargeable
e-cigarette

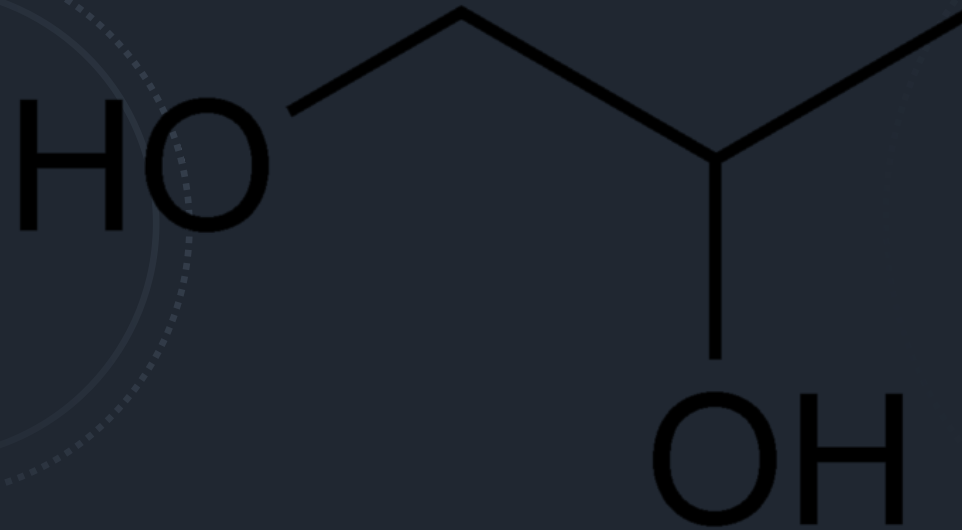


Disposable
e-cigarette

Liquid Components

Propylene Glycol (PG)

- PG is a base ingredient in vape juice. PG is a colourless, nearly odourless thick liquid, with a slightly sweet flavour.
- It is commonly used in foods purchased everyday at the supermarket (i.e. salad dressing, soft drinks, flavoured teas etc) as well as being present in cosmetics, dog food and hygiene products. In a vape product, PG is designed to provide the throat hit, require by smokers looking to mimic smoking.



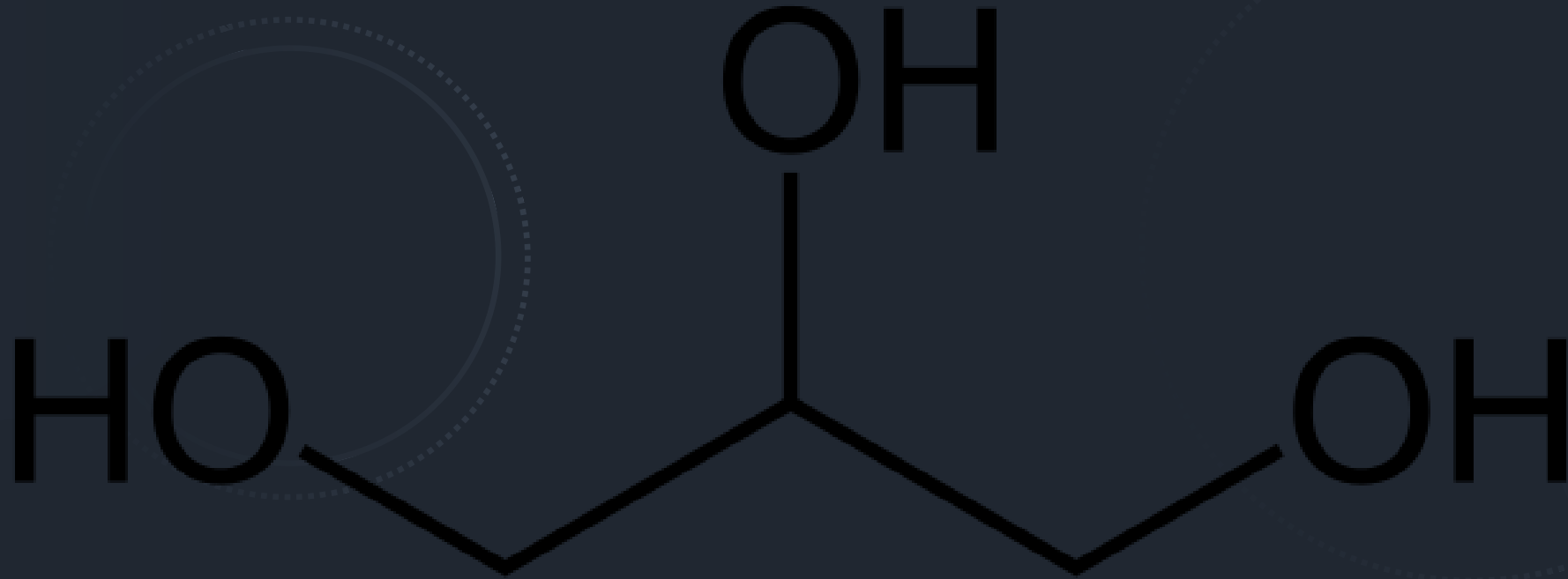
Liquid Components

Vegetable Glycerine (VG)

VG is also a base ingredient in vape juice. It is a natural substance that is taken from vegetable oil. It is much thicker than PG and it is what generates the big vape clouds you often see.

VG is known to sweeten flavours and smoothens the vape aerosol when inhaled.

Larger, open system vaping products, have a high density of VG in their liquid (can be between 70 to 90% of the liquid) to create massive vape clouds.



Liquid Components

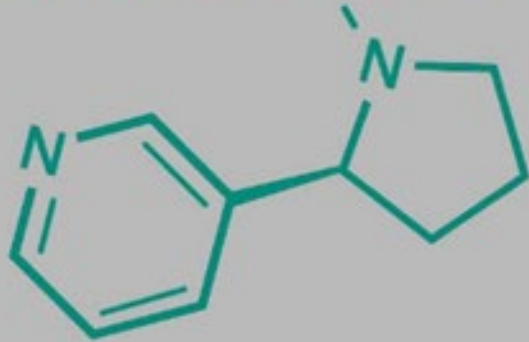
Nicotine

There are two types of nicotine used in vaping products. Free base nicotine and nicotine salts.

Freebase nicotine is the purest form of nicotine directly from the tobacco plant. Nicotine salt (nic salt) is created by balancing the pH levels using an acid like lactic or benzoic.

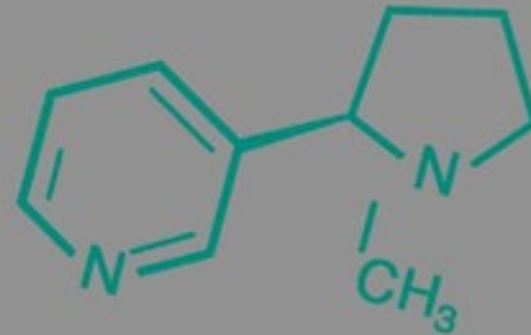
Nic salt will absorb into a smoker's blood stream quicker, mimicking a cigarette, while freebase nicotine is a slower absorption, like a patch or gum.

NICOTINE FREEBASE



VS

NICOTINE SALT



Liquid Components

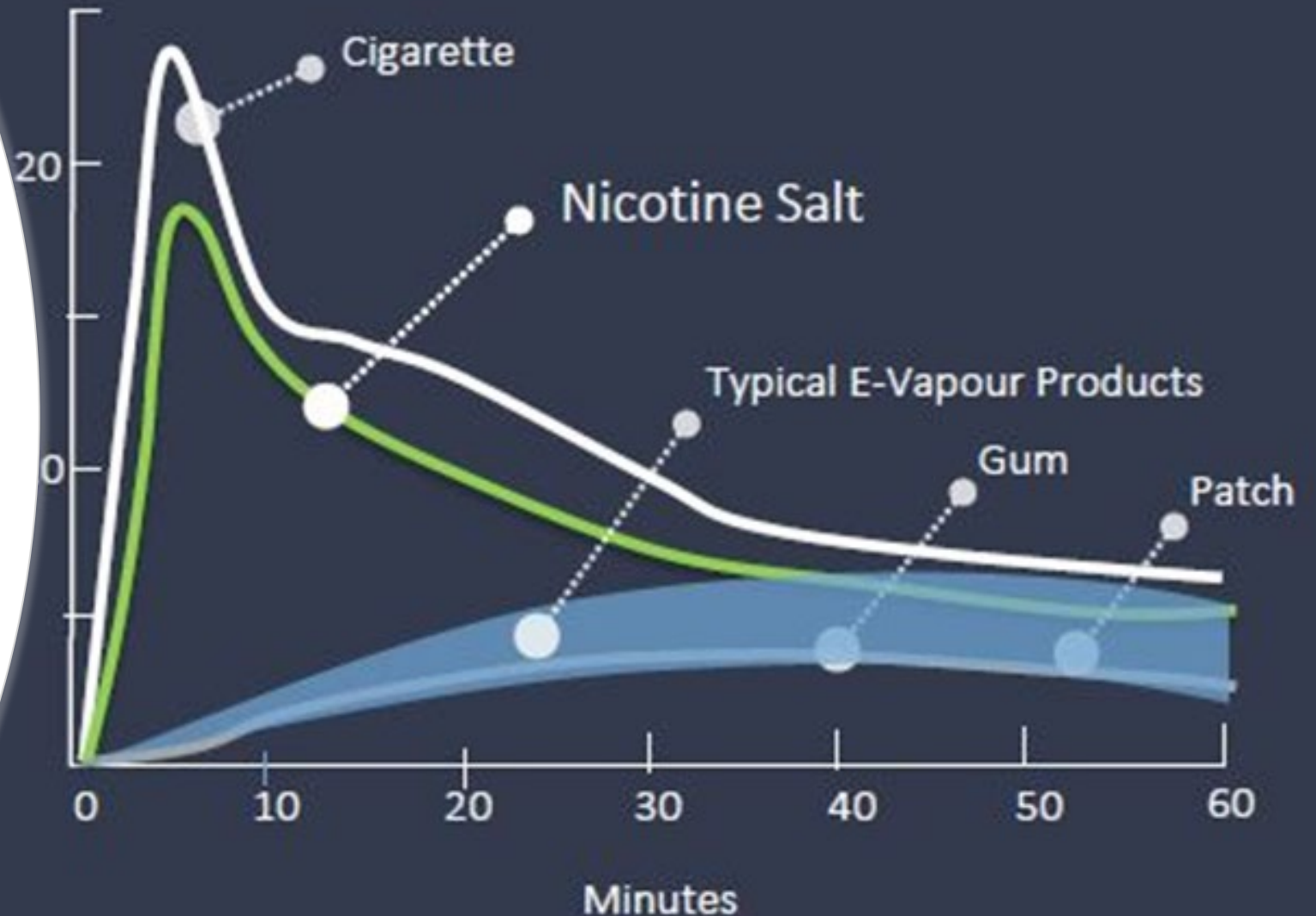
Nicotine

There are varying strengths of nicotine used, depending on the device type, the juice mix (PG/VG ratios) per 1ml of vape liquid. Some record as a percentage of the liquid and some by weight or milligram (mg).

Strength is always a relationship of consumption per 1ml. Whether that be a 1ml closed system unit or a 5ml open tank. The strength is in relation to the ml's consumed and not the liquid purchased.

If I vape a 1ml pod a day of 18mg nicotine, I vape 18mg a day. If I buy a 6mg nicotine juice and put it in a 5ml tank, and vape a tank a day, I consumer 30mg of nicotine.

Vapers may say to you I only use a 6mg and the other I only use an 18mg, it must be converted in consumption per day.





Device / Batteries

All vape products come with two basic parts, the battery (device) and the top section that holds the liquid, called a pod or an atomiser. In this section we'll cover the basics of the battery.

The battery, or most commonly referred to as the device, is the power unit of the vape product.

They are a lithium ion battery that powers a vape unit. Some devices are rechargeable, and some are a one-time use product. Some devices come with the ability to adjust the wattage output, and some are a fixed wattage.

Most devices have a specifically designed pod/atomiser that goes with it, designed to ensure the safe use of the product. Some have multipurpose fittings with different atomisers that can be added.



Pods / Atomisers



As previously mentioned, there are closed and open system pods/atomisers on the market. Some pods come prefilled, and some are open. Nearly all atomisers are open in nature (consumer fill them).

Prefilled pods are designed for the manufacturers device and accurate emission reads can be made, as the juice & pod are specifically designed for the device.

It is unusual, if not rare, to find the manufacturer of an open system pod/atomiser to also be a juice manufacturer. Meaning that open pod/atomiser is not specifically designed for the juice a consumer may add to it. This makes accurate emissions readings harder to achieve as the combinations of juices, flavours, pods/atomisers and settings on the device (wattage and resistance – temperature of the coil) can vary greatly.

Consumers can make their own juice flavour and nicotine strength, which can be different each time it's made.

Consumers will normally choose to use open systems for a greater range of flavours, nicotine strengths, more vapour created and cost.





Australian Government
Department of Health
Therapeutic Goods Administration

Nicotine vaping products and vaping devices

Guidance for the *Therapeutic Goods (Standard
for Nicotine Vaping Products) (TGO 110) Order
2021* and related matters

Version 1.2, July 2021

TGA Health Safety
Regulation



TGO-110 Compliance

From October 1st 2021, all vape products sold in Australia in a Pharmacy, must comply with the TGO-110 standards. A link to the TGO-110 legislation is here <https://www.legislation.gov.au/Details/F2021L00595>.

Vape products sold to and dispensed from Australian pharmacies must have sufficient information to demonstrate that the nicotine vaping product conforms with the TGO-110 standards. With that they need to have an assigned sponsor to import nicotine vape products in Australia for sale to Pharmacies.

To be very clear, the TGA does not approve vape products as meeting the TGO-110 standards.