HEALTH BASICS

Liquid incense

Liquid incense is a product label often used for inhaled alkyl nitrite chemicals called poppers.

WHAT IT IS
A label often used for recreational alkyl nitrite products

WHERE IT COMES UP
Product packaging, poison advice, or conversations about poppers

WHY IT MATTERS
Inhalation or swallowing can cause serious toxic effects

WHAT IT IS NOT
Not ordinary incense and not a diagnosis

WHO TO ASK
A pharmacist, poison centre, or emergency service

HOW IT IS CHECKED
Product testing and clinical blood tests when poisoning is suspected

Overview

"Liquid incense" is not a medical term or a standard description of one substance. It is commonly used on the packaging of products known as poppers . These products usually contain chemicals called alkyl nitrites , such as amyl, butyl, isobutyl, isopropyl, or pentyl nitrite.

The label may suggest that the liquid is a room fragrance. Similar products may be sold as leather cleaner, nail polish remover, or another household product. These descriptions do not mean the contents are safe to inhale or swallow.

Liquid incense is not the same as incense oil used in a diffuser. It is also not the same as nitrous oxide, sometimes called laughing gas. Because labels and ingredients are not always reliable, appearance or brand name alone cannot confirm what a bottle contains.

Alkyl nitrite products are often inhaled for a brief feeling of warmth, light-headedness, or muscle relaxation. This article explains the health meaning of the term. It does not provide instructions for using these products.

How it works

Alkyl nitrites widen blood vessels by relaxing the smooth muscle in their walls. Smooth muscle works automatically and is also found in other parts of the body. When blood vessels widen quickly, blood pressure can fall and the heart may beat faster.

These effects usually begin rapidly because inhaled chemicals can pass from the lungs into the bloodstream. The strength and duration cannot be predicted safely from a product label. Bottles sold under the same general name may contain different chemicals or concentrations.

Alkyl nitrites can also change haemoglobin, the protein in red blood cells that carries oxygen. The altered form is called methaemoglobin . A small amount is normally present, but a high amount prevents blood from delivering oxygen effectively. This condition is called methaemoglobinaemia .

Swallowing the liquid can cause a much larger exposure than inhalation. Contact with the skin, mouth, or eyes may also cause chemical irritation or burns.

Why it matters for your health

A major concern is the sudden fall in blood pressure. This can cause dizziness, fainting, weakness, or injury from a fall.

The risk is especially important when alkyl nitrites are combined with medicines that also lower blood pressure by widening blood vessels. These include erectile dysfunction medicines such as sildenafil, tadalafil, vardenafil, and avanafil. Combining them can cause a dangerous drop in blood pressure.

Prescription nitrate medicines used for chest pain, including nitroglycerin and isosorbide medicines, can create a similar interaction. If you use either type of medicine, a pharmacist can explain the interaction without requiring you to identify a product brand.

Alkyl nitrites may also cause methaemoglobinaemia. Possible signs include blue, grey, or unusually pale lips or skin, headache, shortness of breath, confusion, marked tiredness, or a fast heartbeat. A standard fingertip oxygen monitor may give an abnormal reading, but it cannot confirm the diagnosis. A specific blood test is needed.

Some products, particularly those containing isopropyl nitrite, have been linked to injury at the centre of the retina. The retina is the light-sensitive tissue at the back of the eye. This problem is often called poppers maculopathy and may cause blurred central vision, blind spots, distorted vision, or sensitivity to light.

What can go wrong

Conditions and situations related to liquid incense include:

Get emergency help for collapse, severe breathing difficulty, a seizure, confusion, chest pain, or blue or grey lips or skin. These can indicate a serious fall in blood pressure or reduced oxygen delivery.

Swallowing liquid incense also needs immediate poison advice, even if the person initially seems well. Do not make the person vomit unless a poison specialist specifically instructs you to do so. Keep the bottle or packaging for identification, but do not delay emergency care to search for it.

New loss of vision, a dark or blurred area in the centre of vision, or marked visual distortion needs urgent medical assessment. Less urgent concerns, such as questions about a past exposure with no current effects, can usually be discussed with a pharmacist, primary care service, or poison centre.

- Low blood pressure: This may lead to dizziness, fainting, collapse, or injury.
- Methaemoglobinaemia: The blood cannot carry and release oxygen normally.
- Abnormal heart rhythm or strain: A rapid heartbeat and low oxygen can place stress on the heart.
- Poppers maculopathy: Damage near the centre of the retina may affect detailed vision.
- Chemical injury: The liquid can irritate or burn the skin, eyes, mouth, throat, or digestive tract.
- Accidental poisoning: A small bottle may be mistaken for a drink, medicine, essential oil, or vaping liquid.
- Haemolysis: Red blood cells can break down, especially in some people with glucose-6-phosphate dehydrogenase deficiency, usually called G6PD deficiency.

What you can do

There is no home test that can reliably identify the chemical or strength in a bottle. Product wording, smell, colour, and brand reputation are not substitutes for laboratory analysis.

Practical steps include:

If the liquid touches the eyes or skin, move away from the source and rinse the affected area with clean lukewarm water. Remove contaminated clothing. Contact a poison centre or urgent care service for advice based on the product and the type of exposure.

A clinician assessing possible poisoning may check blood pressure, heart rhythm, oxygen

readings, and blood tests. Co-oximetry is a blood test that can measure methaemoglobin. Eye symptoms may be assessed with retinal imaging, including optical coherence tomography, which creates detailed cross-sectional pictures of the retina.

If there has been no exposure and you are only trying to identify a product, there may be nothing medical to check. A poison information service can still help interpret the label.

- Read the full ingredient list, while remembering that an unregulated label may be incomplete.
- Keep the container away from drinks, medicines, vaping liquids, flames, and children.
- Tell emergency or poison services what the label says and how exposure occurred.
- Keep a list of medicines, especially erectile dysfunction medicines and prescription nitrates.
- Ask a pharmacist about interactions if you are unsure whether a medicine affects blood pressure.
- Arrange an eye assessment for new central blurring or distortion after exposure.

Common questions

Is liquid incense the same as ordinary incense?

Usually not when the term appears on a small bottle associated with poppers. Ordinary incense products are made to release fragrance into a room, although their fumes and oils can have separate health risks. The packaging and ingredient list may help, but labels are not always dependable.

Is it the same as amyl nitrite?

Not necessarily. Amyl nitrite is one alkyl nitrite, but products may contain other nitrites or a mixture. "Liquid incense" does not identify a specific chemical.

Can the smell reveal what is in the bottle?

No. Smell cannot reliably identify the ingredient, concentration, or contamination. Deliberately smelling an unknown product may also cause exposure.

Can a pulse oximeter rule out poisoning?

No. A fingertip monitor may show an unusual or persistently low oxygen reading in methaemoglobinaemia, but it cannot identify the cause or rule it out. Symptoms and a blood test guide the assessment.

What information should I give a poison centre?

Give the product name, listed ingredients, how the exposure happened, when it occurred, and any current effects. Mention medicines taken around the same time. Keep the container available if this can be done safely.

Should I wait for symptoms after someone swallows it?

No. Contact a poison centre or emergency service promptly. Serious effects may require testing and treatment even when the early signs are unclear.

Sources

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