

DAFTAR PUSTAKA

Buku

- Andi Hamzah, *Asas-Asas Hukum Pidana*, Jakarta: Rineka Cipta, 2010.
- Barda Nawawi Arief, *Bunga Rampai Kebijakan Hukum Pidana*, 2002.
- Catherine E. Housecroft dan Alan G. Sharpe, *Inorganic Chemistry*, (Harlow: Pearson Education, 2012).
- Dadang Hawari, *Penyalahgunaan dan Ketergantungan NAPZA*, Jakarta: Fakultas Kedokteran Universitas Indonesia, 2009.
- European Commission, *Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 Laying Down a Procedure for the Provision of Information in the Field of Technical Regulations and of Rules on Information Society Services*, Official Journal of the European Union, 17 September 2015.
- European Commission, *Amendment of the Opium Act Decree and List II in relation to the inclusion of nitrous oxide*, Notification No. 2022/0365/NL, 2022.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), *New Psychoactive Substances: Global Markets, Local Consequences*, Luxembourg: Publications Office of the European Union, 2021.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), *Nitrous Oxide: Health and Social Responses*, 2021.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), *New Psychoactive Substances: Global Markets, Global Threats and the COVID-19 Pandemic*, Luxembourg: Publications Office of the European Union, 2020.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), *Recreational Use of Nitrous Oxide: A Growing Concern*, 2022.
- Gary L. Miessler, Paul J. Fischer, dan Donald A. Tarr, *Inorganic Chemistry*, 5th ed. (Boston: Pearson, 2014).
- Government of the Netherlands, *Amendment to the Opium Act regarding Nitrous Oxide Regulation*, Den Haag: Government of the Netherlands, 2023.
- Hari Sasangka, *Narkotika dan Psikotropika dalam Hukum Pidana*, Bandung: Mandar Maju, 2003.
- Siswanto Sunarso, *Penegakan Hukum Psikotropika dalam Kajian Sosiologi Hukum*, Jakarta: RajaGrafindo Persada, 2004.
- John Emsley, *Nature's Building Blocks: An A–Z Guide to the Elements*, (Oxford: Oxford University Press, 2011).
- Muladi, *Kapita Selektta Sistem Peradilan Pidana*, Semarang: Badan Penerbit Universitas Diponegoro, 2004.
- Moeljatno, *Asas-Asas Hukum Pidana*, Jakarta: Rineka Cipta, 2008.
- Rika Lestari, "Kebijakan Hukum Pidana dalam Penanggulangan Tindak Pidana," *Respublica: Jurnal Hukum*, Vol. 20, No. 1, 2021.
- Roeslan Saleh, *Perbuatan Pidana dan Pertanggungjawaban Pidana*, Jakarta: Aksara Baru, 1983, 20.

- Soedjono Dirdjosisworo, *Patologi Sosial Penyalahgunaan Narkoba*, Jakarta: Rajawali Pers, 2010.
- Soedjono Dirdjosisworo, *Narkotika dan Remaja*, Bandung: Alumni, 2000.
- Siswanto Sunarso, *Penegakan Hukum Psikotropika dalam Kajian Sosiologi Hukum*, Jakarta: Raja Grafindo Persada, 2004.
- Soekidjo Notoatmodjo, *Promosi Kesehatan dan Perilaku Kesehatan*, Jakarta: Rineka Cipta, 2012.
- Sudarto, *Hukum dan Hukum Pidana*, Bandung: Alumni, 1986.
- Trimbos Institute, *Nitrous Oxide: Recommendations for Local Integrated Policy*, Utrecht: Trimbos Instituut, 2023.
- Trimbos Institute, *Nitrous Oxide: From Concerns to Action*, Utrecht: Trimbos Institute, 2024.

Jurnal/Artikel

- Abdul Nasir, "Kekosongan Hukum dan Percepatan Perkembangan Masyarakat," *Jurnal Hukum Replik*, Vol. 5, No. 2, September 2017.
- Emmanuel Gernez, G.R. Lee, Jean-Pierre Niguet dkk., "Nitrous Oxide Abuse: Clinical Outcomes, Pharmacology, Pharmacokinetics, Toxicity and Impact on Metabolism," *Toxics* 2023.
- Ibor M. Brunt, Wim van den Brink, dan Jan van Amsterdam, "Mechanisms Involved in the Neurotoxicity and Abuse Liability of Nitrous Oxide: A Narrative Review," *International Journal of Molecular Sciences*, Vol. 23, No. 23, 2022.
- Fachrizza Sidi Pratama, "Fenomena *Rechtsvacuum* dalam Peraturan Pemerintah Republik Indonesia Nomor 51 Tahun 2020 Terkait Masa Perpanjangan Paspor Menjadi 10 Tahun," *Journal of Law and Border Protection*, Vol. 1, No. 1, 2019.
- Jefri Ramadhan dkk., "Penegakan Hukum Terhadap Tindak Pidana di Bidang Cukai," *Cendekia: Jurnal Penelitian dan Pengkajian Ilmiah*, Vol. 1, No. 9, 2024.
- Lydia Harlina Martono dan Satya Joewana, *Mencegah Bahaya Penyalahgunaan Narkoba Melalui Pendidikan Keluarga*, Jakarta: Balai Pustaka, 2008.
- Membantu Pemulihan Pecandu Narkoba dan Keluarganya*, Jakarta: Balai Pustaka, 2006.
- M. Zawilska dan J. Wojcieszak, "New Psychoactive Substances: Classification and Effects," *International Journal of Molecular Sciences*, Vol. 21, No. 7, 2020.
- Mark A. Gillman, "Mini-Review: A Brief History of Nitrous Oxide (N₂O) Use in Neuropsychiatry," *Current Drug Research Reviews*, 2019.
- Novita Sari, "Penerapan Asas Ultimum Remedium dalam Penegakan Hukum Pidana," *Jurnal Penelitian Hukum De Jure*, Vol. 17, No. 3, September 2017.
- O'Leary, F., & Samman, S., "Vitamin B12 in Health and Disease", *Nutrients*, Vol. 2, No. 3, 2010.
- Piet Hein van Kempen & Janine van Vliet, "The Dutch Drug Policy: Principles and Practice," *International Journal of Drug Policy*, Vol. 17, 2006.
- International Criminal Law in the Netherlands*, Alphen aan den Rijn: Kluwer Law International, 2010.

- Prayogi Widodo, “Hambatan-Hambatan Penerapan Penghentian Penuntutan Perkara Tindak Pidana Berdasarkan Restorative Justice,” *Jurnal Hukum Ius Publicum*, Vol. 4, No. 2, 2023.
- Rui Dai, Zhiqiang Huang, Timothy E. Larkin dkk., “Psychedelic Concentrations of Nitrous Oxide Reduce Functional Differentiation in Frontoparietal and Somatomotor Cortical Networks,” *Communications Biology* 6, 1284, 2023.
- Stephen J. Kaar et al., “Up: The Rise of Nitrous Oxide Abuse: An International Perspective,” *Journal of Psychopharmacology*, Vol. 30, No. 5, 2016.
- Syamsudin dan Rospita Adelina Siregar, “Vape Berbasis Etomidate-Ketamin dan Isu Ketidakpastian Hukum dalam Klasifikasi Narkoba Berdasarkan Regulasi Terbaru,” *Jurnal Kolaboratif Sains*, Vol. 9, No. 1, Januari 2026.
- Stephen Snelders, *Leprosy and Colonialism: Suriname under Dutch Rule, 1750–1950*, Manchester: Manchester University Press, 2017.
- Tibor M. Brunt, Wim van den Brink, dan Jan van Amsterdam, “Mechanisms Involved in the Neurotoxicity and Abuse Liability of Nitrous Oxide: A Narrative Review,” *International Journal of Molecular Sciences*, 2022.
- World Health Organization (WHO), *Neuroscience of Psychoactive Substance Use and Dependence*, Geneva: WHO Press, 2004.
- Yesmil Anwar & Adang. 2008. *Pembaharuan Hukum Pidana: Reformasi Hukum Pidana*, Gramedia Widiasarana Indonesia. Jakarta.
- Yuni Priskila Ginting, “Penyelesaian Perkara Pidana di Luar Pengadilan melalui Pendekatan Restorative Justice,” *The Prosecutor Law Review*, Vol. 2, No. 1, April 2024.

Peraturan Perundang-Undangan

- European Commission, *Amendment of the Opium Act Decree and List II in relation to the inclusion of nitrous oxide*, Notification No. 2022/0365/NL, 2022, 1-2.
- Government of the Netherlands, *Amendment to the Opium Act regarding Nitrous Oxide Regulation*, Den Haag: Government of the Netherlands, 2023.5
- Undang-Undang Nomor 1 Tahun 2023 tentang Kitab Undang-Undang Hukum Pidana (KUHP).
- Undang-Undang Nomor 5 Tahun 1997 tentang Psikotropika.
- Undang-Undang Nomor 17 Tahun 2023 tentang Kesehatan.
- Undang-Undang Nomor 25 Tahun 2009 tentang Narkotika.
- Undang-Undang Nomor 35 Tahun 2009 tentang Narkotika.
- Undang-Undang Nomor 6 Tahun 2023 tentang Penetapan Peraturan Pemerintah Pengganti Undang-Undang Nomor 2 Tahun 2022 tentang Cipta Kerja Menjadi Undang-Undang.

Website

- Badan Kebijakan Pembangunan Kesehatan, “Gas Tertawa dan Celah Kebijakan Kesehatan Publik”, <https://www.badankebijakan.kemkes.go.id/gas-tertawa-dan-celah-kebijakan-kesehatan-publik/>, diakses pada 16 April 2026.

- Badan Kebijakan Pembangunan Kesehatan, “Gas Tertawa dan Celah Kebijakan Kesehatan Publik”, <https://www.badankebijakan.kemkes.go.id/gas-tertawa-dan-celah-kebijakan-kesehatan-publik/>, diakses pada 16 April 2026.
- Badan Kebijakan Pembangunan Kesehatan, Kementerian Kesehatan RI, “Gas Tertawa dan Celah Kebijakan Kesehatan Publik”, 2024. <https://www.badankebijakan.kemkes.go.id/gas-tertawa-dan-celah-kebijakan-kesehatan-publik/>, Diakses pada tanggal 16 Februari 2024
- Badan Pengawas Obat dan Makanan (BPOM), “BPOM Bongkar Peredaran Baby Whip Berisi Gas Tertawa di Marketplace”, <https://www.pom.go.id/siaran-pers/bpom-bongkar-peredaran-baby-whip-berisi-gas-tertawa-di-marketplace>, diakses pada 16 April 2026.
- Badan Pengawas Obat dan Makanan (BPOM), “BPOM Bongkar Peredaran Baby Whip Berisi Gas Tertawa di Marketplace”, <https://www.pom.go.id/siaran-pers/bpom-bongkar-peredaran-baby-whip-berisi-gas-tertawa-di-marketplace>, diakses pada 16 April 2026.
- Dinas Kesehatan Kabupaten Blitar, “Bahaya Penyalahgunaan Gas Tertawa”, <https://dinkes.blitarkab.go.id/?p=3437>, diakses pada 16 April 2026.
- Detiknews “Viral Video Lula Lahfah Diduga Gunakan Whip Pink, Ini Penjelasan BPOM”, 2024, <https://news.detik.com/berita/d-8336055/polisi-tetap-usut-asal-usul-whip-pink-meski-kasus-kematian-lula-lahfah-disetop>, diakses pada 20 April 2026.
- Detik.com, “Heboh Whip Pink di Media Sosial, BPOM Awasi Peredarannya”, 2024, <https://health.detik.com/berita-detikhealth/d-8329122/bpom-buka-suara-soal-penyalahgunaan-whip-pink-akan-awasi-bareng-bnn>, diakses pada 20 April 2026.
- Dr. Fauzan Azhari SpPD, “Bahaya Nitrous Oxide (Laughing Gas): Efek dan Dampaknya Jika Disalahgunakan,” tersedia pada Halodoc, <https://www.halodoc.com/artikel/bahaya-nitrous-oxide-laughing-gas-efek-dan-dampaknya-jika-disalahgunakan?srsId=AfmBOosAXPL1-IaUDXKRPcKbyse246bUTEfvImhqtOezxOnzNrypexI>, diakses pada 1 Mei 2026
- Badan Narkotika Nasional Kota Mataram, Efek Penggunaan Zat Psikoaktif Terhadap Tubuh, Dapat Dilihat pada: <https://mataramkota.bnn.go.id/efek-penggunaan-zat-psikoaktif-terhadap-tubuh/>, diakses pada 12 Mei 2026.
- IPB University, “Dokter IPB University Sebut Penyalahgunaan Whip Pink Berbahaya Berisiko Kematian” <https://www.ipb.ac.id/news/index/2026/02/dokter-ipb-university-sebut-penyalahgunaan-whip-pink-berbahaya-berisiko-kematian/>, diakses pada 16 April 2026.
- Dinas Kesehatan Kabupaten Blitar, “Bahaya Penyalahgunaan Gas Tertawa”, <https://dinkes.blitarkab.go.id/?p=3437>, diakses pada 16 April 2026.

LAMPIRAN

Lampiran 1. *Amendment to the Opium Act regarding Nitrous Oxide Regulation, 2023.*



EUROPEAN COMMISSION
Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
Single Market Enforcement
Notification of Regulatory Barriers

Notification Number : 2022/0365/NL (Netherlands)

Amendment of the Opium Act Decree and List II, belonging to the Opium Act, in relation to the inclusion of nitrous oxide (laughing gas) on this list

Date received : 25/05/2022

End of Standstill : Not applicable (closed)

Message

Message 002

Communication from the Commission - TRIS/(2022) 01882

Directive (EU) 2015/1535

Translation of the message 001

Notification: 2022/0365/NL

No abre el plazo - Nezahajuje odklady - Fristerne indledes ikke - Kein Fristbeginn - Viivituste perioodi ei avata - Καμία έναρξη προθεσμίας - Does not open the delays - N'ouvre pas de délais - Non fa decorrere la mora - Neietekmē atlikšanu - Atidējimai nepradedami - Nem nyitja meg a késésekét - Ma' jiftaħ il-perjodi ta' dawmien - Geen termijnbegin - Nie otwiera opóźnień - Não inicia o prazo - Neotvorí oneskorenia - Ne uvaja zamud - Määräaika ei ala tästä - Inleder ingen frist - Не се предвижда период на прекъсване - Nu deschide perioadele de stagnare - Nu deschide perioadele de stagnare.

(MSG: 202201882.EN)

1. MSG 002 IND 2022 0365 NL EN 25-05-2022 NL NOTIF

2. NL

3A. Ministerie van Financiën, Dienst Douane Noord, CDIU

3B. Ministerie van Volksgezondheid, Welzijn en Sport
Directie Wetgeving en Juridische Zaken

4. 2022/0365/NL - X00M

5. Amendment of the Opium Act Decree and List II, belonging to the Opium Act, in relation to the inclusion of nitrous oxide (laughing gas) on this list

6. Nitrous oxide (laughing gas)

7. -

8. With this amendment to the Opium Act Decree, nitrous oxide is placed on List II of the Opium Act. As a result, it is prohibited to prepare, process, sell, deliver, supply, transport, be in possession or manufacture laughing gas or take it in or out of the territory of the Netherlands. The actual applications of nitrous oxide remain authorised without prejudice. The actual application of nitrous oxide includes use in veterinary medicine as an anaesthetic and short-acting painkiller or as a medical aid, in technical industries as syngas and oxidising gas, and in the hospitality and food industry for sprayed food such as whipped cream.

The objective of the ban is to reduce the wide availability of nitrous oxide for recreational use, thereby limiting the supply of nitrous oxide for recreational use while ensuring availability for actual applications.

A prohibition to market, use or consume a product as contained in this proposal (Article 3 of the Opium Act relating to the List II of the Opium Act) is considered a technical regulation within the meaning of Directive 2015/1535.

9. Nitrous oxide has various actual applications in healthcare, food and gastronomic sectors and in technical industries. In addition to these original applications, nitrous oxide is also used more and more frequently and in larger quantities as a recreational drug. The national centre for information and advice on intoxications (Nationaal Vergiftigingen Informatie Centrum) (hereinafter: NIVIC) reported a sharp increase in registered reports in 2019 in the number of health complaints following recreational use of nitrous oxide. The increase in the number of reports to the NIVIC in spring 2019 prompted the Secretary of State for Health, Welfare and Sport to ask the CAM for a risk assessment of nitrous oxide.

The risk assessment was carried out by the Risk Assessment Committee and showed that nitrous oxide is a substance with substantial risks to (public) health and society. For example, the report of the Risk Assessment Committee shows that it cannot be excluded that serious neurological damage may occur even after single use in the case of a person suffering from a functional vitamin B12 deficiency. A B12 deficiency is usually unknown in humans. Nitrous oxide is widely used in various sections of the population, including vulnerable groups, such as young and/or inexperienced users. The Risk Assessment Committee also mentions in particular that the wide and easy availability and accessibility of nitrous oxides clearly contributes to the problem and poses a risk to public health. The Risk Assessment Committee recognises the local issues experienced, such as nuisance. Based on this risk profile, the Risk Assessment Committee recommends the recreational use of nitrous oxide as a drug is discouraged and the high availability of nitrous oxide as a recreational drug is reduced. With this decision, the government responds to the recommendation to reduce the wide availability of nitrous oxide as a recreational drug.

The inclusion of nitrous oxides on List II and the requirements for excluded use are justified by the importance of protecting public health. The aim of the proposed measures is to reduce the number of incidents related to or involving nitrous oxide (potentially irreparable neurological damage but also traffic incidents, for example) and reduce damage to (public) health and society.

The requirements are proportionate, because nitrous oxide is used as a recreational drug in addition to the original applications and this can lead to health damage and damage to society. The protection of public health is so important that the inclusion of these requirements is justified. A balanced approach has been chosen so that the measure does not go beyond what is necessary. In fact, the actual applications of nitrous oxide are excluded in the general meaning of Article 3 of the Opium Act. In order to avoid a disproportionate burden, a notification obligation, licensing system and exemption system for carrying out operations with nitrous oxide intended for technical purposes or as a food additive have not been introduced. However, manufacturers and (intermediate) traders of medical nitrous oxide and laughing gas as a medical aid will have to apply for an exemption under Articles 6 and 8 of the Opium Act, in line with other Opium Act drugs which are also medical products. This exemption system is seen as proportionate because it is a very small group that is largely already bound by a licensing system under the Medicinal Products Law. Manufacturers and traders of medicines are already used to working with the exemption system from the Opium Act. Applying for or amending an exemption is a limited additional burden for them. In addition, in most cases, manufacturers of nitrous oxides will produce both nitrous gas intended for use as a medicinal product and nitrous gas intended for use as a medical aid, thereby minimising the additional burden for this small group. Finally, the measures are applied without discrimination.

10. Restriction of the trade or use of a substance, preparation or chemical product
Numbers or titles of basic texts: Opium Act and Opium Act Decree

11. Yes

12. The use of nitrous oxide as a recreational drug poses a danger to health and society and therefore forms the basis for listing nitrous oxide on List II of the Opium Act (Ow).

There is no safe limit of use that can simply be determined and limited use can also lead to serious health damage. The most common effects that occur during or shortly after nitrous use are dizziness, confusion, and headaches. With intensive use (even once) a vitamin B12 deficiency may develop, which may cause neurological problems and blood diseases. Excessive use is known to lead to serious neurological health risks, including paralysis symptoms. The National Drug Monitor (NDM) shows that nitrous oxide is mainly used among different groups of young people and young adults. Use increased in recent years among school children and MBO/HBO students (measured until 2019) and there are indications of an increase in (problematic) use within certain groups of young people. Recent reports show that neurologists and addiction physicians, among others, find that the risks and harmfulness seem more and more significant than initially thought. The growing knowledge in this field supports the seriousness of the risks and harmfulness of the use of nitrous oxide as a recreational drug and the need to treat this measure with urgency so that the ban can enter into force as soon as possible. In view of previous health risks, the Lower House has also requested that the ban enter into force as soon as possible.

13. No

14. No

15. In the explanatory note in paragraph 7 (Implications for the regulatory burden).

16. TET aspect

NO - The draft does not have a major impact on international trade.

SPS aspect

No, the draft is neither a sanitary nor a phytosanitary measure

European Commission

Contact point Directive (EU) 2015/1535

Fax: +32 229 98043

email: grow-dir2015-1535-centra@ec.europa.eu