## **Explanatory** notes

#### **Data sources**

Multiple government sources of data were used to generate the present report, including form D ("Annual information on substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances"); the Pre-Export Notification Online (PEN Online) system and the PEN Online Light system; the Precursors Incident Communication System (PICS); results achieved under Project Prism and Project Cohesion, which are the international operational initiatives regarding chemicals used in the illicit manufacture of, respectively, synthetic drugs, and cocaine and heroin; and official communications with competent national authorities and official national reports on the drug and precursor control situation.

Unless otherwise specified, data provided on form D are referred to by the calendar year to which they apply. The reporting period for data from the PEN Online and PEN Online Light systems and PICS is from 1 November 2023 to 1 November 2024, unless otherwise specified. Additional information might have been provided through regional and international partner organizations, as indicated in the report.

With regard to data on seizures, readers should bear in mind that reported seizures generally reflect the corresponding level of regulatory and law enforcement activity at that specific time. In addition, as seizures are often the result of law enforcement cooperation among several countries (e.g. through controlled deliveries), the occurrence of seizures and the volumes seized in a given country should not be misinterpreted or used as an overestimation in assessing that country's role in the overall situation of trafficking in precursors.

#### **Boundaries**

The boundaries and names shown and the designations used on the maps in the present publication do not imply official endorsement or acceptance by the United Nations.

The designations employed and the presentation of the material in the present publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Countries and areas are referred to by the names that were in official use at the time the relevant data were collected.

#### Metric units

Reference to "tons" is to metric tons, unless otherwise stated.

# Abbreviations

The following abbreviations are frequently used in INCB reports on precursors:

AIBN	azobisisobutyronitrile
ANPP	4-anilino-N-phenethylpiperidine
4-AP	4-anilinopiperidine   N-phenyl-4-piperidinamine
APAA	alpha-phenylacetoacetamide   2-phenylacetoacetamide
APAAN	alpha-phenylacetoacetonitrile
1-boc-4-AP	1-boc-4-anilinopiperidine <i>tert</i> -butyl
	4-(phenylamino)piperidine-1-carboxylate
1-boc-4-piperidone	tert-butyl 4-oxopiperidine-1-carboxylate
CBD	cannabidiol
1-CBz-4-piperidone	benzyl 4-oxopiperidine-1-carboxylate
DEPAPD	diethyl (phenylacetyl)propanedioate
EAPA	ethyl <i>alpha</i> -phenylacetoacetate   ethyl 3-oxo-2-phenylbutanoate
FTZ	free trade zone (also known as a free zone or free port)
GBL	gamma-butyrolactone
GHB	gamma-hydroxybutyric acid
HHC	hexahydrocannabinol
IMDPAM	isopropylidene (2-(3,4-methylenedioxyphenyl)acetyl)malonate
INCB	International Narcotics Control Board
IONICS	Project Ion Incident Communication System
LSD	lysergic acid diethylamide
MAMDPA	methyl 3-oxo-2-(3,4-methylenedioxyphenyl)butanoate
MAPA	methyl alpha-phenylacetoacetate   methyl 3-oxo-2-phenylbutanoate
MDMA	3,4-methylenedioxymethamphetamine (commonly known as "ecstasy")
3,4-MDP-2-P	3,4-methylenedioxyphenyl-2-propanone (also known as piperonyl methyl ketone or PMK)
3,4-MDP-2-P ethyl glycidate	ethyl ester of 3,4-MDP-2-P methyl glycidic acid   PMK ethyl glycidate
3,4-MDP-2-P methyl glycidate	methyl ester of 3,4-MDP-2-P methyl glycidic acid   PMK methyl glycidate
MMDPPA	alpha-methyl-1,3-benzodioxole-5-propanamide
NPP	N-phenethyl-4-piperidone
P-2-P	1-phenyl-2-propanone (also known as benzyl methyl ketone or BMK)
PEN Online system	Pre-Export Notification Online system
PEN Online Light system	Pre-Export Notification Online Light system
PICS	Precursors Incident Communication System
THC	tetrahydrocannabinol
UNODC	United Nations Office on Drugs and Crime
WCO	World Customs Organization

### Glossary

The following terms and definitions are frequently used in INCB reports on precursors:

chemical intermediate A chemical generated during a multi-step synthesis process that is normally not isolated but immediately consumed in the next synthesis step. Stable chemical intermediates can be isolated and have been encountered as purpose-made substitute chemicals for controlled precursors

designer precursor A close chemical relative of a controlled precursor that is purpose-made to circumvent controls and usually does not have any recognized legitimate use

diversion The transfer of substances from licit to illicit channels

forensic profiling analysis In-depth laboratory analysis to trace any by-products generated during illicit manufacture, with a view to, inter alia, identifying the precursors used in such manufacture

immediate precursor A precursor that is generally only one reaction step away from the end product

industrial-scale laboratory A laboratory for the manufacture of synthetic drugs in which oversized equipment and/ or glassware that is either custom-made or purchased from industrial processing sources and/or that uses serial reactions is used and in which significant amounts of drugs are produced in very short periods of time, the amount being limited only by the need for access to precursors and other essential chemicals in adequate quantities and for the logistics and workers to handle large amounts of drugs and chemicals

international monitoring list of equipment used in the illicit manufacture of drugs A list prepared and regularly updated by INCB that includes items of equipment of international relevance and for which substantial evidence exists of their use in the illicit manufacture of narcotic drugs, psychotropic substances, new psychoactive substances and/or precursors

limited international special surveillance list of non-scheduled substances A list prepared, pursuant to Economic and Social Council resolution 1996/29, and regularly updated by INCB that includes substitute and alternative chemicals, as well as groups of common derivatives and other related substances that can be converted into one of the scheduled precursors by readily applicable means, and for which substantial information exists on their use in illicit drug manufacture

mapping exercise An initiative of the Board aimed at aiding Governments in identifying industries that manufacture, consume or in any way deal with chemicals (whether or not under national or international control) that could also be used as precursors in illicit drug manufacture

"masked" precursor A chemical that is designed to disguise a controlled precursor and that can be easily converted into the controlled precursor. The concept of a "masked" precursor is based on what is known in organic synthesis as "protection group chemistry"

pharmaceutical preparation A preparation for therapeutic (human or veterinary) use in its finished dosage form that contains precursors present in such a way that they can be used or recovered by readily applicable means; such preparations may be presented in their retail packaging or in bulk

precursor In general, a starting material used to manufacture a narcotic drug, a psychotropic substance or another precursor; sometimes used to refer exclusively to the substances in Table I and Table II of the 1988 Convention

pre-precursor A precursor of a precursor that can then be used to manufacture the desired end product

seizure The act of prohibiting the transfer, conversion, disposition or movement of property or assuming custody of or control over property on the basis of an order issued by a court or competent authority; it may be temporary or permanent (i.e. confiscation); different national legal systems may use different terms

stopped shipment A shipment permanently withheld, either because reasonable grounds exist to believe that it may constitute an attempted diversion, or as a result of administrative problems or because of other grounds for concern or suspicion

suspicious order (or suspicious transaction) An order (or transaction) of questionable, dishonest or unusual character or condition, for which there is reason to believe that a chemical that is being ordered, imported or exported or is transiting a country or territory is destined for use in the illicit manufacture of narcotic drugs or psychotropic substances