

# FACT SHEET ON PRECURSOR CONTROL

## What are precursor chemicals?

One can distinguish between precursor chemicals in a *stricto sensu*, i.e. chemicals which become incorporated at the molecular level into a narcotic drug or psychotropic substance and reagents and solvents used in the manufacture of such narcotics and psychotropic substances. In the 1998 Political Declaration and its related action plans the term 'precursors' was broadened to encompass all chemicals controlled under the 1988 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances.

**What are the licit uses of precursors?** Precursor chemicals are required in many areas of the chemical industry, pharmaceuticals, cosmetics, perfumes, cleaning agents, pesticides, insecticides, fertilizers, lubricants, explosives as well as in various other industries (textiles, leather, etc.).

**How widespread is the use of precursor chemicals?** According to UN Comtrade data legal exports of precursor chemicals amounted to more than \$8 billion in 2012, equivalent to around 0.5 per cent of all chemical exports. Around 7 per cent of all precursor exports are accounted for by Table I and 93 per cent by Table II substances. While exports of Table II substances increased 3½ times over the 1996-2012 period, exports of Table I precursors only grew by 35 per cent, expressed in constant US dollars.

**From where do precursor chemicals come from?** Some 77 countries, accounting for 77 per cent of the world's total population produced precursor chemicals over the 2010-2012 period. Production takes place in Europe, Asia, the Americas, the Oceania region and, to a lesser extent, in Africa. In the past, most chemicals, including precursor chemicals, were produced in North America and in Europe. Over the last decade, however, Asia emerged as the main production location. Over the 2010-2012 period Asia accounted for 59 per cent of global net exports of precursor chemicals, followed by Europe and the Americas.

**Where do precursor chemicals go?** The analysis of confiscations shows that the overall largest precursor seizures in volume terms over the 2002-2012 period were reported by countries in North America (59 per cent of the total), followed by South America (12 per cent), Europe (4 per cent) and Asia (3 per cent). Africa accounted for 0.05 per cent and the Oceania region for 0.02 per cent of the total. If the analysis is restricted to more recent years (period 2007-2012), the largest seizures were made in South America (60 per cent of the total), followed by North America (17 per cent), Asia (15 per cent) and Europe (8 per cent). Seizures in the Oceania region accounted for 0.1 per cent and Africa for 0.04 per cent of the total.

**How many precursor chemicals are there?** There are hundreds of chemicals that are or could be used in the clandestine manufacture of drugs. The number of precursor chemicals under international control is far more limited.

As of December 2013 15 chemicals were controlled under the stricter regime of Table I and 8 chemicals were controlled under Table II of the 1988 Convention. The total will increase to 24 substances, following the decision of the Commission on Narcotic Drugs in March 2014 to schedule APAAN in Table I.

**What are the most important precursor chemicals?** The most critical chemicals for the clandestine manufacture of narcotics and psychotropic substances are found in Table I. Acetic anhydride is a key precursor chemicals for the manufacture of heroin as well as for P-2-P out of phenylacetic acid, used to manufacture methamphetamine. Potassium permanganate is a key precursor used in the manufacture of cocaine. Ephedrine and pseudoephedrine are the key precursor chemicals for the manufacture of methamphetamine though methamphetamine can be also produced out of P-2-P (which is frequently the case in North America). Outside North America P-2-P and its precursor phenylacetic acid are mainly used for the manufacture of amphetamine. Ecstasy is manufactured out of 3,4-MDP-2-P or some of its precursors such as piperonal, safrole and – increasingly - safrole-rich oils.

**What are substitute chemicals and pre-precursors?** Over the years operators of clandestine laboratories have been creative in identifying alternative chemicals which so-far have not been under (international) control. Many of these substances are pre-precursors, i.e. they enable to produce a chemical which then can be used to manufacture the desired psychotropic substance. Recent examples have been APAAN to produce P-2-P and thus amphetamine, esters of phenylacetate (ethyl phenylacetate, methyl phenylacetate) to produce phenylacetic acid, used for the manufacture of P-2-P and ultimately methamphetamine, 3,4-MDP-2-P methyl glycidate for the manufacture of 3,4-MDP-2-P and thus ecstasy as well as methylamine which can be used in the manufacture of both methamphetamine (in combination with P-2-P) and ecstasy (in combination with 3,4-MDP-2-P).

**The road ahead?** The biggest challenge for international precursor control is to deal with the growing importance of substitute chemicals and pre-precursors that are not under international control. Starting from the 1998 and 2009 Political Declarations and their related action plans, a number of recommendations were developed. They include for countries: to make use of the 'limited international special surveillance list' which was created and is regularly been updated by INCB; to enlarge the system of pre-export notifications (PEN-online) to non-scheduled substances and pharmaceutical preparations; and to actively participate in the Precursors Incident and Communication System (PICS), including for non-scheduled substances. While key instruments have been thus identified, they are, however, still awaiting their universal application.

