Annex IX

Licit uses of the substances in Tables I and II of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988

Knowledge of the most common licit uses of substances in Tables I and II of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988, including the processes and end products in which the substances may be used, is essential for the verification of the legitimacy of orders or shipments. The most common licit uses of those substances reported to the International Narcotics Control Board are as follows:

Substance	Licit uses
Acetic anhydride	Acetylating and dehydrating agent used in the chemical and pharmaceutical industries for the manufacture of cellulose acetate, for textile sizing agents and cold bleaching activators, for polishing metals and for the production of brake fluids, dyes and explosives
Acetone	As a common solvent and intermediate for a variety of substances in the chemical and pharmaceutical industries, including plastics, paints, lubricants, varnishes and cosmetics; also used in the manufacture of other solvents, such as chloroform
N-Acetylanthranilic acid	Used in the manufacture of pharmaceuticals, plastics and fine chemicals
4-Anilino- <i>N</i> -phenethylpiperidine (ANPP)	Used in the pharmaceutical industry for the manufacture of fentanyl
tert-Butyl 4-oxopiperidine-1-carboxylate (1-boc-4-piperidone)	May be used as a building block in the manufacture of pharmaceutical substances, including fentanyl, but the extent of its use for legitimate manufacture and in other areas of synthetic organic chemistry is not known
tert-Butyl 4-(phenylamino)piperidine-1- carboxylate (1-boc-4-AP)	None, except in small amounts for research, development and laboratory analytical purposes
Anthranilic acid	Chemical intermediate used in the manufacture of dyes, pharmaceuticals and perfumes; also used in the preparation of bird and insect repellents
Ephedrine	Used in the manufacture of bronchodilators (cough medicines)
Ergometrine	Used in the treatment of migraine and as an oxytocic in obstetrics
Ergotamine	Used in the treatment of migraine and as an oxytocic in obstetrics
Ethyl ether	Commonly used solvent in chemical laboratories and in the chemical and pharmaceutical industries; mainly used as an extractant for fats, oils, waxes and resins; also used for the manufacture of munitions, plastics and perfumes and, in medicine, as a general anaesthetic
Hydrochloric acid	Used in the production of chlorides and hydrochlorides, for the neutralization of basic systems and as a catalyst and solvent in organic synthesis
Isosafrole	Used in the manufacture of piperonal; to modify "oriental perfumes"; to strengthen soap perfumes; in small quantities, together with methyl salicylate, in root beer and sarsaparilla flavours; and as a pesticide
Lysergic acid	Used in organic synthesis
Methyl <i>alpha</i> -phenylacetoacetate (MAPA)	None, except in small amounts for research, development and laboratory analytical purposes
3,4-Methylenedioxyphenyl-2-propanone	Used in the manufacture of piperonal and other perfume components
3,4-MDP-2-P methyl glycidic acid and its selected esters (methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl and tert-butyl esters)	None, except in small amounts for research, development and laboratory analytical purposes
Methyl ethyl ketone	Common solvent; used in the manufacture of coatings, solvents, degreasing agents, lacquers, resins and smokeless powders
Norephedrine	Used in the manufacture of nasal decongestants and appetite suppressants
Norfentanyl	None, except in small amounts for research, development and laboratory analytical purposes (norfentanyl is a chemical intermediate in legitimate fentanyl manufacture but the extent of its use as a starting material is not known)
N-Phenethyl-4-piperidone (NPP)	Used in the pharmaceutical industry, mainly for the manufacture of fentanyl and carfentanil

Substance	Licit uses
Phenylacetic acid	Used in the chemical and pharmaceutical industries for the manufacture of phenylacetate esters, amphetamine and some derivatives; also used for the synthesis of penicillins and in fragrance applications and cleaning solutions
alpha-Phenyl-acetoacetamide (APAA)	None, except in small amounts for research, development and laboratory analytical purposes
alpha-Phenyl-acetoacetonitrile (APAAN)	None, except in small amounts for research, development and laboratory analytical purposes
N-Phenyl-4-piperidinamine (4-AP)	May be used as a building block in the manufacture of pharmaceutical substances, including fentanyl, but the extent of its use for legitimate manufacture is not known
1-Phenyl-2-propanone	Used in the chemical and pharmaceutical industries for the manufacture of amphetamine, methamphetamine and some derivatives; also used for the synthesis of propylhexedrine
Piperidine	Commonly used solvent and reagent in chemical laboratories and in the chemical and pharmaceutical industries; also used in the manufacture of rubber products and plastics
4-Piperidone	May be used as a building block in the manufacture of pharmaceutical substances, including fentanyl, but the extent of its use for legitimate manufacture and in other areas of synthetic organic chemistry is not known
Piperonal	Used in perfumery, in cherry and vanilla flavours, in organic synthesis and as a component of mosquito repellent
Potassium permanganate	Important reagent in analytical and synthetic organic chemistry; used in bleaching applications, disinfectants, and antibacterial and antifungal agents, and in water purification
P-2-P methyl glycidic acid and its selected esters (methyl, ethyl, propyl, isopropyl, butyl, isobutyl, <i>sec</i> -butyl and <i>tert</i> -butyl esters)	None, except in small amounts for research, development and laboratory analytical purposes
Pseudoephedrine	Used in the manufacture of bronchodilators and nasal decongestants
Safrole	Used in perfumery, for example, in the manufacture of piperonal, and for denaturing fats in soap manufacture
Sulphuric acid	Used in the production of sulphates; as an acidic oxidizer; as a dehydrating and purifying agent; for the neutralization of alkaline solutions; as a catalyst in organic synthesis; in the manufacture of fertilizers, explosives, dyestuffs and paper; and as a component of drain and metal cleaners, anti-rust compounds and automobile battery fluids
Toluene	Industrial solvent; used in the manufacture of explosives, dyes, coatings and other organic substances and as a gasoline additive