EIGHTH MEETING OF THE CONFERENCE OF THE PARTIES ROTTERDAM CONVENTION 2017 UPDATES

By consensus, the Rotterdam Convention (RC) added four (4) more chemicals to Annex III:

1. **SHORT-CHAIN CHLORINATED PARAFFINS** (SCCPs) (industrial chemical)
2. **TRIBUTYLTIN** (TBT) (industrial chemical)
3. **CARBOFURAN** (pesticide)
4. **TRICHLORFON** (pesticide)

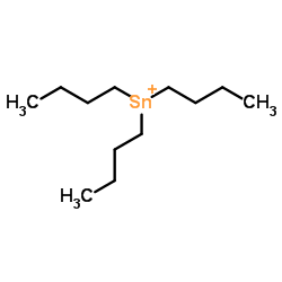
The addition of these highly toxic substances brings the total number of chemicals listed under the Rotterdam Convention to fifty (50).

1. SHORT-CHAIN CHLORINATED PARAFFINS (SCCPS)

- LISTED IN ANNEX III AS: **INDUSTRIAL CHEMICAL** (*on the basis that its use is banned in Norway and Canada*).
- STRUCTURE: Alkanes, chlorinated, characterised by chain lengths, C10-13 with greater than 48% chlorination by weight
- MAIN USE: in metalworking applications and in polyvinyl chloride (PVC) plastics.
- OTHER USES: in paints, adhesives and sealants, leather fat liquors, plastics, and as flame retardants in rubber, textiles and polymeric materials. SCCPs have been used and have substituted polychlorinated naphthalenes (PCNs) and polychlorinated biphenyls (PCBs) in most open applications.
- TRADE NAMES: A70 (wax), Chloroflo, Adekacizer E, Chlorparaffin, Arubren, Chlorowax, Cereclor, Cloparin, Chlorosane, Cloparol, Chlorez, Clorafin, Chlorofin, CW, Derminolfett, Derminolol, EDC-tar, Electrofine, Enpara, Hordaflam, Horda-flex, Hordalub, Hulz, Khp, Meflex, Monocizer, Paroil, Poliks, Tenekil, Toyoparax and Unichlor.

- REASON FOR ITS BAN IN:
    - **NORWAY** – environmental (risk for long term effects to the aquatic environment) and to a lesser extent the risk to human health (*classified as a category 3 carcinogen, i.e. there is limited evidence of carcinogenic effects*)
    - **CANADA** – human health and environmental threat
- ALTERNATIVES: technically feasible alternatives are commercially available for all known uses of SCCPs. Information on the economic feasibility and accessibility of these alternatives in developing countries is not available.

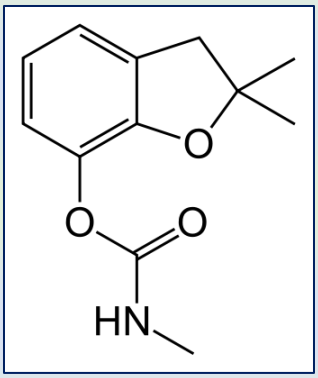
2. TRIBUTYLTIN (TBT) (COMPOUNDS)



- LISTED IN ANNEX III AS: **INDUSTRIAL CHEMICAL** (*on the basis that its use is banned in Canada*). Previously listed as a pesticide (specifically as a biocide) at COP-4, 2008.
- The 1st chemical to be listed in both Industrial Chemical and Pesticide categories in Annex III.
- TBT COMPOUNDS INCLUDE: tributyltin oxide, tributyltin benzoate, tributyltin chloride, tributylin fluoride, tributyltin linoleate, tributyltin methacrylate, tributyltin naphthenate.
- USES:
    - May be found in products that are mainly used in the PVC processing industry (*in its pure form TBTs are unlikely to be used commercially*).
    - Minor uses of products containing TBT compounds include: glass coating and catalysts.
    - Other uses include: as an auxiliary agent in stereo selective intermediate synthesis in the pharmaceutical industry, and niche applications for some drugs.
- REASON FOR ITS BAN AS AN INDUSTRIAL CHEMICAL IN:
    - **CANADA** – environmental risks (*concerns with regard to aquatic organisms, persistence in the environment and bioaccumulation in aquatic organisms*)

- ALTERNATIVES: There are demonstrated substitutes for PVC tin stabilisers include lead or mixed metals such as calcium and zinc, as well as organic stabilisers. TBTs are known to be a starting material in the manufacture of material preservative. While no alternatives as a starting material are known to exist for this application, other non-TBT material preservative may be available.

3. CARBOFURAN

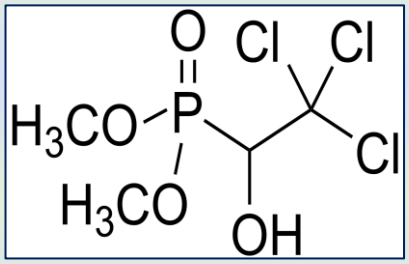


- LISTED IN ANNEX III AS: **PESTICIDE** (specifically used as an insecticide) *on the basis that its use is banned in the European Union, Canada and CILSS (7 African countries)*
- USES: to control a great variety of defoliators and wood boring insects which attack many fruit and vegetable crops, potatoes, corn, soybean, banana, coffee, sugar beet and rice. Applied directly to the soil, although it can be applied aerially (Canada).
- TRADE NAMES: Furadan (main name), Carbodan, Carbosip, Chinofur, Curaterr, Furacarb, Kenafuran, Pillarfuron, Rampart, Nex, Yaltox, Crisfuran.

- REASON FOR ITS BAN IN:
    - **EU** – human health risk (possible unacceptable risks for consumers, in particular children); environmental risk (possible unacceptable risks for ground water contamination and for birds and mammals, aquatic organisms, bees, non-target arthropods, earthworks, and soil non-target organisms)
    - **CANADA** – human health risk (unacceptable risk to works and consumers due to dietary exposure from food and drinking water); environmental risk (unacceptable risk to terrestrial and aquatic organisms)
    - **CILSS** – human health risk (unacceptable risk to users and to consumers due to exposure from food and drinking water); environmental risk (high risk to birds and fresh water invertebrates)

- ALTERNATIVES: Some effective alternatives to carbofuran (depending on the application) include Capture™ 2EC, chlorantraniliprole, flubendiamide, quinalphos. ***Primarily, countries should consider promoting, as appropriate, integrated pest management, agroecology and organic agriculture as a means of reducing or eliminating the use of hazardous pesticides.***

4. TRICHLORFON



- LISTED IN ANNEX III AS: **PESTICIDE** (primarily as an insecticide, known use as an acaricide) *on the basis that its use is banned in the European Union and Brazil.*
- SYNONYMS: trichlorphon, metriphonate, metrifonate, chlorphos, DEP, dipterex
- USES:
    - as an insecticide to control cockroaches, crickets, silverfish, bedbugs, fleas, cattle grubs, flies, ticks, leaf miners and leaf-hoppers. *It is applied to vegetable, fruit and field crops; livestock; ornamental and forestry plantings; in agricultural premises and domestic settings; in greenhouses*
    - for control of parasites of fish in designated aquatic environments
    - for treating domestic animals for control of internal parasites.
- TRADE NAMES: Dipterex (as the main name), Trifonal 500, Cekufon 80 SP, Saprofon, Susperex, Danex, Dipagrex, Diplox, Dipsol, Ledipex, Dylox, Tugon, Briten, Denkaphon, Ditrifon, Lucavex, Proxol, Acrol, DEP and Dimetox.
- REASON FOR THE BAN IN:
    - **EU** – Human health (unacceptable risks for operators, workers and bystanders); environment (high risk for aquatic invertebrates)
    - **BRAZIL** – health risks for agricultural workers, bystanders and general population

- ALTERNATIVES: None reported. ***Primarily, countries should consider promoting, as appropriate, integrated pest management, agroecology and organic agriculture as a means of reducing or eliminating the use of hazardous pesticides***.

NO AGREEMENT WAS REACHED ON THE FOLLOWING CHEMICALS BEING CONSIDERED:

1. **CHRYSOTILE ASBESTOS** - This is the most commonly used form of asbestos and can be found today in roofs, ceilings, walls and floors of homes and businesses;

2. **CARBOSULFAN** - This insecticide is used for controlling a wide range of soil-dwelling and foliar insect pests. Examples of uses include control of millipedes, springtails, symphylids, wireworms, pygmy mangold beetles, aphids, caterpillars, flea beetles, stem borers, leafhoppers, planthoppers, codling moth, scales and free-living nematodes;

3. **PARAQUAT DICHLORIDE FORMULATIONS** - Paraquat is used to control weeds in many agricultural and non-agricultural use sites. It is also used as a defoliant on crops;

4. **FENTHION** – This is an organothiophosphate insecticide, avicide, and acaricide. Like most other organophosphates, its mode of action is via cholinesterase inhibition.

NOTE:

Listing <u>does not</u> constitute a ban, but does however enable Parties to make informed decisions on future imports of these chemicals, based on a structured information exchange, also called the Prior Informed Consent Procedure (PIC).

THE PRIOR INFORMED CONSENT (PIC) PROCEDURE

The PIC procedure is a mechanism for formally obtaining and disseminating the decisions of importing Parties as to whether they wish to receive future shipments of those chemicals listed in Annex III of the Convention and for ensuring compliance with these decisions by exporting Parties.

For each of the chemicals listed in Annex III and subject to the PIC procedure a decision guidance document (DGD) is prepared and sent to all Parties. The DGD is intended to help governments assess the risks connected with the handling and use of the chemical and make more informed decisions about future import and use of the chemical, taking into account local conditions.

All Parties are required to take a decision as to whether or not they will allow future import of each of the chemicals in Annex III of the Convention. These decisions are known as import responses. A listing of the import responses given for each chemical subject to the PIC procedure is circulated by the Secretariat to all DNAs every six months via the PIC Circular and all import responses are available on the Convention's website.

All exporting Parties are required to ensure that exports of chemicals subject to the PIC procedure do not occur contrary to the decision of each importing Party. They should ensure that import responses published in the PIC Circular are immediately communicated to their exporters, industry and any other relevant authorities, such as the Department of Customs.