

Annex 1 - Prohibited List, Rev.: 04-27/01/2025

Issuing Directorate: Health, Safety, Environment (HSE) and Operational Risk Directorate

Responsible Manager: Alessandra Freitas | **Registration:** 81050012 | **Area:** Process Security and Operational Risk

Target audience: Process and Risk Safety, Supplies, Logistics, HSE, Warehouse, Storage, Laboratory, Pilot Plant, Repair Facility, Plant, Operation, Geotechnics, Effluent treatment plant (ETP), Water Treatment Plant (WTP) and other areas carrying out activities involving the chemical product application cycle (registration, requisition, transport, storage, transfer, use and post-use).

Need for Training: (x)YES ()NO

Prohibited substances

Item	Group	Chemical substance	CAS	Reference for use	Technical reference	Reason for the ban
1	Organochlorines	Dichlorodiphenyltri chloroethane no (DDT)	50-29-3 (DDT)	Pesticide used in agriculture to control insects	Stockholm Convention Rotterdam Convention Law 11.936/2009 Ministry of Agriculture Order No. 329 of 1985	Persistent in the environment, bioaccumulative and toxic to wildlife and humans.
			72-54-8 (DDD)	Controlling vectors of malaria, typhus and other insect-borne diseases		
			72-55-9 (DDE)	Forest pest control		
				Sanitary agent for moth eradication and lice control		
		Aldrin	309-00-2		Stockholm Convention Rotterdam Convention Ordinance No. 329 of 1985 of the Ministry of Agriculture	
		Dieldrin	60-57-1	Pesticide used in agriculture to control insects		
		Clordano	57-74-9	Pesticide used in agriculture to control insects in a wide range of crops, Termite control, applied directly to the ground	Stockholm Convention Rotterdam Convention	
		Heptachlor	76-44-8			

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				Biocide used in soil treatment for seeds, grains and sorghums Insecticide	Stockholm Convention Rotterdam Convention Ordinance No. 329 of 1985 of the Ministry of Agriculture		
				Wood preservative			
		Toxaphene	8001-35-2			Pesticide used in agriculture to control insects	Stockholm Convention Rotterdam Convention Ordinance No. 329 of 1985 of the Ministry of Agriculture
						Control of mites and ticks in cattle	
		Hexachlorobenzene	118-74-1			Pesticide for use in agriculture to control fungi	Stockholm Convention Rotterdam Convention
						Wood preservative	
						Industrial application as a solvent and additive in the manufacture of rubber, PVC and colourants	
		Hexachlorocyclohexane (BHC)	319-84-6 319-85-7			Pesticide used in agriculture to control insects	Stockholm Convention Rotterdam Convention Ordinance No. 329 of 1985 of the Ministry of Agriculture
						Fighting malaria and Chagas disease	
		Lindane (isomer of BHC)	58-89-9			Pesticides used in agricultural activities	Stockholm Convention Rotterdam Convention Ordinance No. 329 of 1985 of the Ministry of Agriculture
						Wood preservative	

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Need for Training: (x)YES ()NO

		Polychlorinated Biphenyls (PCBs)	1336-36-3 11097-69-1	Industrial use in transformers, capacitors, hydraulic fluids and plasticising resins Cupinicide used as a stabiliser in various plastic formulations and special rubbers	Stockholm Convention Rotterdam Convention Interministerial Ordinance (MIC/MI/MME) 0019 of 19/1/1981	
		Pentachlorophenol and its salts and esters	87-86-5	Biocide with a broad spectrum of action (insecticide, fungicide, bactericide and molluscicide) Wood preservative and disinfectant	Stockholm Convention Rotterdam Convention Conama 396/2008 Conama 357/2005	
		Endosulfan	115-29-7	Pesticide used in farming and commercial animal husbandry	Rotterdam Convention Ministry of Agriculture Ordinance No. 329 of 1985	
		1,2 - Dichloroethane	107-06-2	Industrial application as an intermediate for the synthesis of other chemical products, solvent, petrol additive, pesticide with a broad spectrum of action	Rotterdam Convention Conama 420/2009 Ordinance 2.914/2011 Conama 396/2008 Conama 357/2005	

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Need for Training: (x)YES ()NO

		$C_2H_3Cl_3$ 1,1,1- (R-140a)	71-55-6	Industrial use for refrigeration (cooling gases) Industrial application for the production of organic solvents, fire extinguishers, foams fire extinguishers and foams, insulation (extruded polystyrene) Aerosol packaging (sprays)	Montreal Protocol of 1989 Ibama Ordinance No. 29 of 4 May 1995	Powerful destroyer of the ozone layer
2	Auxins	2,4,5 - Trichlorophenoxyacetic acid and its ester salts	93-76-5	Powerful pesticide with a broad spectrum of action	Rotterdam Convention	Toxic effects and persistence in the environment
3	Chloroacetanilides	Alaclor	15972-60-8	Herbicide used to control the growth of broadleaf weeds and grasses in maize and many other crops	Rotterdam Convention	Potentially carcinogenic and toxic to aquatic life
4	Carbamates	Aldicarb	116-06-3	Pesticides used in agricultural activities	Rotterdam Convention	Highly toxic to humans and animals
5	Dinitrophenols	Binapacril	485-31-4	Powerful pesticide with a broad spectrum of action	Rotterdam Convention Law 7.082/89	High toxicity.
		Dinitro-ortho-cresol (DNOC) and its salts (such as ammonium, potassium and sodium salts)	534-52-1	Efficient herbicide used in agriculture to control pests. It has secondary effects as an insecticide, acaricide and fungicide	Rotterdam Convention	High toxicity and adverse effects on human health

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Need for Training: (x)YES ()NO

		Dinoseb and its salts and esters	88-85-7	Efficient phenolic herbicide used in agriculture for selective pest control. Selective insecticide used in grape growing Seed drying agent	Rotterdam Convention	Due to its toxicity
		1,2 - dibromoethane (EDB)	106-93-4	Powerful pesticide with a broad spectrum of action	Rotterdam Convention	High toxicity
6	Carboximides	Captafol	2425-06-1	Pesticide used in agriculture to control fungi in fruit and legume crops. Used as an additive to fungicide products to control wood pests	Rotterdam Convention Law 7.082/89	Due to its toxicity
7	Formamidines	Chlordimeform	6164-98-3	Pesticide used in agriculture to control mites, lice and insects on fruit and legume crops and in commercial animal husbandry. Used in the pharmaceutical industry and in therapeutic cosmetics	Rotterdam Convention Law 7.082/89 Federal Law on Pesticides 8.802/1989	Due to its high toxicity
		Chlorobenzilate	510-15-6	Pesticide used in agriculture to control mites, lice and insects in fruit and legume crops and in commercial animal husbandry.	Rotterdam Convention	Due to its toxicity

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8	Ethers	Ethylene Oxide	75-21-8	Pesticide with a broad spectrum of action, mainly in the control of bacteria and spores, fungi and non-fungal yeasts Steriliser for medical, hospital and food materials Production of ethylene glycol for subsequent production of polyester polymers	Rotterdam Convention	High toxicity and carcinogenic potential
9	Fluoracetamide	Fluoracetamide	640-19-7	A rodenticide used to control urban pests such as rats and other rodents of sanitary interest.	Rotterdam Convention Ordinance 37/1974	Due to its high toxicity
10	Organophosphates	Monocrotophos	6923-22-4	Pesticides used in agriculture to control mites, insects and weeds Hormonal plant growth regulator	Rotterdam Convention RDC 215/2006 ANVISA	Due to its high toxicity
		Paration	56-38-2		Rotterdam Convention	Due to its high toxicity
		Azinphos-methyl	86-50-0	Pesticide	Banned in the European Union and Brazil (Anvisa)	Highly dangerous for both human health and the environment
11	Chemical combinations	Powder formulations containing: Benomil ≥ 7%, Carbofuran ≥ 10%, Thiram ≥ 15%	17804-35-2, 1563-66-2,	Powerful pesticides used in agriculture to control fungi (broad spectrum of action) and ectoparasites.	Rotterdam Convention Law 7.082/89	Due to its high toxicity

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		Phosphamidone (soluble liquid formulations of the substance exceeding 1,000 g active ingredient/l)	13171-21-6	Pesticide used in agriculture to control mites, insects, nematodes and weeds Hormonal plant growth regulator	Rotterdam Convention Law 7.082/89	
12	Organometallics	Tetraethyl lead	78-00-2	Additive for petrol to improve octane rating Industrial application, mainly in boilermaking Marine paint	Rotterdam Convention	Due to their toxicity and harmful effects on human health
		Tetramethyl lead	75-74-1		Rotterdam Convention	
13	Asbestos	Crocidolite, Amosita, Anthophyllite, Actinolite Tremolite	12001-28-4 12172-73-5 77536-67-5 77536-66-4 77536-68-6 1332-21-4	Industrial application in the production of materials, mainly those used in civil construction fibre cement tiles; cladding for roofing buildings; plasters and stuccos; fireproof cladding; thermal and acoustic insulation; closure sheets, as well as protective clothing for firefighting; lining for car braking systems and clutches	Rotterdam Convention International Labour Organization Law 9.055/1995 769/1976/EU 69/1997/EU 31/1999/EU	Carcinogenic effects and respiratory diseases
		Chrysotile (white asbestos)	12001-29-5 32207-32-0			
14	Aromatic Amines	Benzidine and its salts	92-87-5	Industrial application for the production of paints, dyes and pigments Hardening agent in the rubber industry Pharmaceutical application, Reagent substance	Rotterdam Convention 769/1976/EU	Due to its high toxicity and carcinogenic potential

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Need for Training: (x)YES ()NO

				in chemical laboratories		
15	Chlorofluorocarbons	(CFCs) CFCl ₃ (CFC-11) CF ₂ Cl ₂ (CFC-12) C ₂ F ₃ Cl ₃ (CFC-113) C ₂ F ₄ Cl ₂ (CFC-114) C ₂ F ₅ Cl (CFC-115) Halons	75-69-4 75-71-8 76-13-1 76-14-2 76-15-3 353-59-3 598-73-2 124-73-2 75-72-9 354-56-3 76-12-0 422-78-6 3182-26-1 29255-31-0 1599-41-3 661-97-2 422-86-6 2354-06-5	Industrial use for refrigeration (cooling gases) Industrial application for the production of organic solvents, fire extinguishers, foams fire extinguishers and foams, insulation (extruded polystyrene) Aerosol packaging (sprays)	Montreal Protocol of 1989 Ibama Ordinance No. 29 of 4 May 1995	Due to its negative impact on the ozone layer

REVISION HISTORY

Revision number	Date	Brief description of the changes
04	27/01/2025	Revision of Annex 1, transferring HCFCs to Annex 2, as they are still within the deadline for replacement in developing countries. Transferred from the Restricted list to the Prohibited list: Azinphos-methyl Deletion of the Requirement column and inclusion of the restriction reason column