ROTTERDAM CONVENTION

SECRETARIAT FOR THE ROTTERDAM CONVENTION
ON THE PRIOR INFORMED CONSENT PROCEDURE
FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES
IN INTERNATIONAL TRADE

UNEP

FORM FOR NOTIFICATION
OF FINAL REGULATORY ACTION TO BAN OR SEVERELY RESTRICT A CHEMICAL

Country: Guyana

SECTION 1 IDENTITY OF CHEMICAL SUBJECT TO THE FINAL REGULATORY ACTION

1.1	**Common name**	Tetraethyl lead and Tetramethyl lead
1.2	**Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists**	Tetraethyl lead -Plumbane, tetraethyl-TEL Tetramethyl lead- Plumbane, tetramethyl TML
1.3	**Trade names and names of preparations**	The pure grade of TEL and TML are rarely sold; it is more usual to find TEL and TML in mixtures such as antiknock preparations and leaded gasoline. A typical formulation to produce automotive gasoline consists of about 62% tetraethyl lead (TEL), 18% ethylene dibromide (scavenger for lead), 18% ethylene dichloride (scavenger for lead), and 2% of other ingredients, such as dye, petroleum solvent, and stability improver. A typical formulation to produce aviation gasoline includes about 61-62% TEL, 35-36% ethylene dibromide, and 3% of dye, solvent, inhibitor, etc. For overall best performance of aviation piston engines, the scavenger for lead

	consists entirely of ethylene dibromide. Another type of additive is made by mixing TEL with TML to produce physical mixtures containing 10-75% TML.

1.4 Code numbers

1.4.1	CAS number	Tetraethyl lead - 78-00-2 Tetramethyl lead- 75-74-1
1.4.2	Harmonized System customs code	3811.11
1.4.3	Other numbers (specify the numbering system)	Tetraethyl lead – UN No: 1649 E.C. Customs No: 2931 00 95 EINECS No: 201-075-4 RTECS No: TP4550000 Tetramethyl lead UN No: 1649 E.C. Customs No: 2935 00 95 EINECS No: 200-897-0 RTECS No: TP4725000

1.5 Indication regarding previous notification on this chemical, if any

1.5.1 ☒ This is a first time notification of final regulatory action on this chemical.

1.5.2 ☐ This notification replaces all previously submitted notifications on this chemical.
Date of issue of the previous notification: _____

SECTION 2 FINAL REGULATORY ACTION

2.1 The chemical is: ☒ **banned** **OR** ☐ **severely restricted**

2.2 Information specific to the final regulatory action

2.2.1 Summary of the final regulatory action

Pesticides and Toxic Chemicals Control (Prohibited pesticides) Order No.4 of 2015 made under the Pesticides and Toxic Chemicals Control Act 2000 (No 13 of 2000) Prohibits importation, sale and use of Tetraethyl lead and Tetramethyl lead

2.2.2 Reference to the regulatory document, e.g. where decision is recorded or published

Official Gazette of Guyana dated 2nd April 2015.

2.2.3 Date of entry into force of the final regulatory action

2nd April 2015.

2.3 Category or categories where the final regulatory action has been taken

2.3.1 All use or uses of the chemical in your country prior to the final regulatory action

No Known use of the chemical in Guyana Prior to the final regulatory action

2.3.2 Final regulatory action has been taken for the category ☒ Industrial

Use or uses prohibited by the final regulatory action

Not Applicable

Use or uses that remain allowed (only in case of a severe restriction)

Not Applicable

2.3.3 Final regulatory action has been taken for the category ☐ Pesticide

Formulation(s) and use or uses prohibited by the final regulatory action

No Known use of the chemical in Guyana Prior to the final regulatory action

Formulation(s) and use or uses that remain allowed
(only in case of a severe restriction)

All Formulation or preparation and all use prohibited by the final regulatory action.

2.4 Was the final regulatory action based on a risk or hazard evaluation? ☒ Yes

☐ **No** (If no, you may also complete section 2.5.3.3)

2.4.1 If yes, reference to the relevant documentation, which describes the hazard or risk evaluation

Reference to the Decision Guidance Document as prepared by UNEP and FAO

2.4.2 Summary description of the risk or hazard evaluation upon which the ban or severe restriction was based.

2.4.2.1 Is the reason for the final regulatory action relevant to human health?

☒ Yes

☐ No

If yes, give summary of the hazard or risk evaluation related to human health, including the health of consumers and workers

One significant source of human exposure to lead has been through inorganic lead compounds emitted from the combustion process as a direct result of the use of alkyl lead as an additive in gasoline. Lead emitted from the exhaust of vehicles is primarily in the form of inorganic particles (e.g. PbBrCl), with only small amounts (less than 10% of total emissions) in the form of organolead vapours (Royal Society of Canada, September 1986). The discussion on toxicological properties therefore focuses on the risks to human health associated with exposure to lead, tetraethyl lead and tetramethyl lead..

Expected effect of the final regulatory action

The possibility of risks and exposure to this chemical by humans decreased.

2.4.2.2 Is the reason for the final regulatory action relevant to the environment?

☐ Yes

☒ No

If yes, give summary of the hazard or risk evaluation related to the environment

Expected effect of the final regulatory action

2.5 Other relevant information regarding the final regulatory action

2.5.1 Estimated quantity of the chemical produced, imported, exported and used

	Quantity per year (MT)	Year
produced	NIL	
imported	NIL	
exported	NIL	
used	NIL	

2.5.2 Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions

Not Applicable

2.5.3 Other relevant information that may cover:

2.5.3.1 Assessment of socio-economic effects of the final regulatory action

None expected since this product has not been used in the country for at least twenty years.

2.5.3.2 Information on alternatives and their relative risks, e.g. IPM, chemical and non-chemical alternatives

None

2.5.3.3 Basis for the final regulatory action if other than hazard or risk evaluation

None

2.5.3.4 Additional information related to the chemical or the final regulatory action, if any

None

SECTION 3 PROPERTIES

3.1 Information on hazard classification where the chemical is subject to classification requirements

International classification systems e.g. WHO, IARC, etc.	Hazard class
WHO / IPCS	

Other classification systems e.g. EU, USEPA	Hazard class
US EPA	
EU	T+(very toxic) N (dangerous for the environment) R61 May cause harm to the unborn child R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed R33 Danger of cumulative effects R50/53 Very toxic to aquatic organisms, may cause long-term adverse effect in the aquatic environment R62 Possible risk of impaired fertility

3.2 Further information on the properties of the chemical

3.2.1 Description of physico-chemical properties of the chemical

Identity Tetraethyl lead Tetramethyl lead Formula Pb(C2H5)4 Pb(CH3)4 Colour and Texture colourless viscous liquid, with characteristic odour. Commercial mixtures may be dyed red, orange or blue colourless viscous liquid, with characteristic odour.

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Reference

Reference to the Decision Guidance Document, Tetraethyl lead and Tetramethyl lead, as prepared by UNEP and FAO

3.2.2 Description of toxicological properties of the chemical

Lowest toxic dose oral rat: 112 mg/kg

LD50 oral rat: 105 mg/kg

LC50 inhalation rat: 8,870 mg/m3

Lowest lethal dose oral rabbit: 24 mg/kg

Lowest lethal dose skin rabbit: 3391 mg/kg

IPCS (1991)

Reference

Reference to the Decision Guidance Document, Tetraethyl lead and Tetramethyl lead, as prepared by UNEP and FAO

3.2.3 Description of ecotoxicological properties of the chemical

Dust. According to the WHO (1995), dust is a significant source of exposure to lead,
particularly for young children, as has been demonstrated in several studies correlating children's blood lead concentrations with dust lead levels.

Air. Ambient air can be a major pathway of lead distribution in the environment (WHO,
1995). Processes that release lead into the air include mining and smelting, incineration, gasoline burning, battery manufacturing and sand-blasted or flaking paint. In addition, soils may be a source of airborne lead on a local scale, as suggested by the strong correlation between lead in the dust and lead in soil

Reference

Reference to the Decision Guidance Document, Tetraethyl lead and Tetramethyl lead, as prepared by UNEP and FAO

SECTION 4 DESIGNATED NATIONAL AUTHORITY

Institution	Pesticides and Toxic Chemicals Control Board

Address	N.A.R.E.I Compound, Mon Repos, East Coast Demerara
Name of person in charge	Trecia David
Position of person in charge	Registrar, Pesticides and Toxic Chemicals Control Board
Telephone	592-220-8880
Telefax	220-8838
E-mail address	ptccb@guyana.net.gy

PESTICIDES & TOXIC CHEMICALS REGISTRAR CONTROL

Date, signature of DNA and official seal: Trecia David

17/9/2015

PLEASE RETURN THE COMPLETED FORM TO:

Secretariat for the Rotterdam Convention
Food and Agriculture Organization
of the United Nations (FAO)
Viale delle Terme di Caracalla
00153 Rome, Italy
Tel: (+39 06) 5705 2188
Fax: (+39 06) 5705 3224
E-mail: pic@fao.org

OR

Secretariat for the Rotterdam Co
United Nations Environment
Programme (UNEP)
11-13, Chemin des Anémones
CH – 1219 Châtelaine, Geneva, Switzerland
Tel: (+41 22) 917 8296
Fax: (+41 22) 917 8082
E-mail: pic@pic.int

Definitions for the purposes of the Rotterdam Convention according to Article 2:

(a) 'Chemical' means a substance whether by itself or in a mixture or preparation and whether manufactured or obtained from nature, but does not include any living organism. It consists of the following categories: pesticide (including severely hazardous pesticide formulations) and industrial;

(b) 'Banned chemical' means a chemical all uses of which within one or more categories have been prohibited by final regulatory action, in order to protect human health or the environment. It includes a chemical that has been refused approval for first-time use or has been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process and where there is clear

evidence that such action has been taken in order to protect human health or the environment;

(c) 'Severely restricted chemical' means a chemical virtually all use of which within one or more categories has been prohibited by final regulatory action in order to protect human health or the environment, but for which certain specific uses remain allowed. It includes a chemical that has, for virtually all use, been refused for approval or been withdrawn by industry either from the domestic market or from further consideration in the domestic approval process, and where there is clear evidence that such action has been taken in order to protect human health or the environment;

(d) 'Final regulatory action' means an action taken by a Party, that does not require subsequent regulatory action by that Party, the purpose of which is to ban or severely restrict a chemical.

Pesticides and Toxic Chemicals Control Board

NAREI Compound,
Mon Repos, East Coast Demerara
Guyana, SA.
Tel: (592)-220-8838/8880.
Fax: (592)-220-8933
E-mail: ptccb@guyana.net.gy

6th June, 2017

Dr. Gamini Manuweera
Programme Officer
Secretariat of the Basel, Rotterdam & Stockholm Conventions
International Environment House
11-15 Chemin des Anemones
Geneva, Switzerland

Dear Dr. Manuweera,

Thank you for the phone communication with Mr. Suresh Amichand on the 24th May, 2017 relative to the proposed changes on the notification forms submitted by Guyana.

As the official DNA for Rotterdam Convention (RC) in Guyana, we have reviewed the nineteen documents on the Final Regulatory Action to ban or severely restrict a chemical sent to the RC secretariat and would recommend the following changes to the respective documents as follows:

Chemicals Common Names	**Comments**
Endosulfan	**2.3.1** – Input comment – (All applications as plant protection product)
Tetraethyl Lead	**3.2.3** – Remove Comment – (Dust: According to WHO(1995) dust is a significant source of exposure to lead, particularly for young children.....with dust lead levels)
Polychlorinated Biphenyls (PCBs)	**2.3.3** – Remove both comments and input into **2.3.2** – (1. No known use.....regulatory action. 2. All formulations.....regulatory action)
Polybrominated Biphenyls (PBBs)	**2.3.3** - Remove both comments and input into **2.3.2** – (1. No known use.....regulatory action. 2. All formulations.....regulatory action)
Octa-BDE	**3.2.3** – Remove Comment and input into **3.2.2** – (in an occupational setting inhalation.....European Communities, 2003a)

All for your information and action.

Thank you.

Sincerely,

PESTICIDES & TOXIC CHEMICALS
REGISTRAR
CONTROL BOARD

Trecia David