



(c): As per the information provided by the Food Safety and Standards Authority of India (FSSAI), Ministry of Health and Family Welfare, sub-regulation 2.3.5 of Food Safety and Standards (Prohibition and Restriction on Sales) Regulations, 2011- “No person shall sell or offer or expose for sale or have in his premises for the purpose of sale under any description, fruits which have been artificially ripened by use of acetylene gas, commonly known as carbide gas.

Provided that fruits maybe artificially ripened by use of Ethylene gas at a concentration up to 100ppm (100 I/L) depending upon the crop , variety and maturity”.

(d): As per the information provided by the Food Safety and Standards Authority of India (FSSAI), no separate centralized enforcement data regarding presence of pesticides residues and ripening of fruits and vegetables with banned chemicals is available. However, based on information made available by the States and UTs, who are primarily responsible for enforcement of the provisions of Food Safety and Standard Act, 2006, and rules made there under, details of food samples analyzed, found non-conforming to the norms and action taken during the last three years is at **Annexure II**.

(e): A write up on harmful effects of consuming fruits artificially ripened with Calcium Carbide is uploaded on the FSSAI website for awareness of the public at large. FSSAI also jointly issued advertisements on all India basis in newspapers with Department of Consumer Affairs under the aegis of “Jago Grahak Jago” on artificially ripening of fruits. FSSAI has also asked State Food Safety Commissioners of all States/UTs to undertake awareness campaign on the pesticides/insecticides residues in fruits and vegetables in order to educate consumers. Consumers are also being made aware of need for washing fruits & vegetables before consumption to avoid any harmful effects of pesticides etc. through social media, print media, events, fairs etc.

(f): The Registration Committee (RC) constituted under Section 5 of the Insecticides Act, 1968 registers pesticides after considering its efficacy and safety to human beings, animals and environment. In additions, technical reviews are carried out from time to time to assess the safety of pesticides for their continued use. Based on which, the Central Government has banned/restricted certain pesticides/insecticides for use in the country. The details are at **Annexure III**. Further, in July 2013, an Expert Committee was constituted under the chairmanship of Dr. Anupam Verma, Former National Professor, IARI, New Delhi to review 66 pesticides which are either banned or restricted in one or more countries of the world but continued to be registered in India. Considering the recommendation of Expert Committee as accorded by the Registration Committee, the Ministry of Agriculture & Farmers Welfare, vide its Notification S.O. 4212(E) dated 15<sup>th</sup> December, 2016, has invited objections and suggestions from the public/stakeholders on banning/phasing out of certain pesticides. The details are at **Annexure IV**.

**ANNEXURE I****COMMODITY WISE DETAILS OF THE SAMPLES ANALYSED DURING 2013-16**

<b>Commodity</b>	<b>Samples analyzed</b>	<b>Samples above FSSAI MRL</b>
Fish/Marine	2506	6
Fruits	6838	98
Meat/Egg	1281	0
Milk	1368	0
Pulses	2205	2
Rice	3090	186
Spices	3849	292
Surface Water	1712	0
Tea	522	16
Vegetables	30219	827
Water	3450	0
Wheat	2471	72
<b>Grand Total</b>	<b>59511</b>	<b>1499 (2.5%)</b>

**ANNEXURE II****DETAILS OF FOOD SAMPLES ANALYSED, FOUND NON CONFORMING TO THE FSS NORMS AND ACTION THEREON**

Sr. No.	Year	Total No. of samples taken	No. of Samples Analyzed	No. of Samples found adulterated and Misbranded	No. of Cases Launched		No. of Convictions/ Penalties	
					Criminal	Civil	Convictions	Penalties/ Amount raised in Rupees
1.	2013-14	72,994	72,200	13,571	3105	7130	913	2950/ Rs. 7,34,45,974
2.	2014-15	84537	75282	14716	2687	7988	1402	2795/ Rs.11,28,45,522
3.	2015-16	71,119	65,833	14,283	1,656	8196	516	3,483/ Rs. 21,19,08,436

**ANNEXURE –III**

**LIST OF PESTICIDES WHICH ARE BANNED, REFUSED REGISTRATION AND RESTRICTED IN USE**  
**I. PESTICIDES / FORMULATIONS BANNED IN INDIA**

<b>Pesticides Banned for manufacture, import and use .</b>					
1.	Aldicarb		22. Pentachloro Nitrobenzene (PCNB)		
2.	Aldrin		23. Pentachlorophenol		
3.	Benzene Hexachloride		24. Phenyl Mercury Acetate		
4.	Calcium Cyanide		25. Sodium Methane Arsonate		
5.	Chlorbenzilate		26. Tetradifon		
6.	Chlordane		27. Toxaphene(Camphechlor)		
7.	Chlorofenvinphos		28. Trichloro acetic acid (TCA)		
8.	Copper Acetoarsenite	<b>B.</b>	<b>Pesticide formulations banned for import, manufacture and use</b>		
9.	Dibromochloropropane	1.	Carbofuron 50% SP		
10.	Dieldrin	2.	Methomyl 12.5% L		
11.	Endrin	3.	Methomyl 24% formulation		
12.	Ethyl Mercury Chloride	4.	Phosphamidon 85% SL		
13.	Ethyl Parathion	<b>C.</b>	<b>Pesticide / Pesticide formulations banned for use but continued to manufacture for export</b>		
14.	Ethylene Dibromide (EDB)	1.	Captafol 80% Powder		
15.	Heptachlor	2.	Nicotin Sulfate		
16.	Lindane (Gamma-HCH)	<b>D.</b>	<b>Pesticides Withdrawn</b>		
17.	Maleic Hydrazide	1.	Dalapon	6.	Simazine
18.	Menazon	2.	Ferbam	7.	Sirmate
19.	Metoxuron	3.	Formothion	8.	Warfarin
20.	Nitrofen	4.	Nickel Chloride		
21.	Paraquat Dimethyl Sulphate	5.	Paradichlorobenzene		

**II. PESTICIDES REFUSED REGISTRATION**

<b>S.No.</b>	<b>Name of Pesticides</b>		
1.	2,4, 5-T	10.	EPN
2.	Ammonium Sulphamate	11.	Fentin Acetate
3.	Azinphos Ethyl	12.	Fentin Hydroxide
4.	Azinphos Methyl	13.	Lead Arsenate
5.	Binapacryl	14.	Leptophos (Phosvel)
6.	Calcium Arsenate	15.	Mephosfolan
7.	Carbophenothion	16.	Mevinphos (Phosdrin)
8.	Chinomethionate (Morestan)	17.	Thiodemeton / Disulfoton
9.	Dicrotophos	18.	Vamidothion

**III. PESTICIDES RESTRICTED FOR USE IN THE COUNTRY**

<b>S.No.</b>	<b>Name of Pesticides</b>	<b>Details of Restrictions</b>
1.	Aluminium Phosphide	The Pest Control Operations with Aluminium Phosphide may be

		undertaken only by Govt./Govt. undertakings / Govt. Organizations / pest control operators under the strict supervision of Govt. Experts or experts whose expertise is approved by the Plant Protection Advisor to Govt. of India except <sup>1</sup> Aluminium Phosphide 15 % 12 g tablet and <sup>2</sup> Aluminum Phosphide 6 % tablet. [RC decision circular F No. 14-11(2)-CIR-II (Vol. II) dated 21-09-1984 and G.S.R. 371(E) dated 20 <sup>th</sup> may 1999]. <sup>1</sup> Decision of 282 <sup>nd</sup> RC held on 02-11-2007 and, <sup>2</sup> Decision of 326 <sup>th</sup> RC held on 15-02-2012. The production, marketing and use of Aluminium Phosphide tube packs with a capacity of 10 and 20 tablets of 3 g each of Aluminium Phosphide are banned completely. (S.O.677 (E) dated 17 <sup>th</sup> July, 2001)
2.	Captafol	The use of Captafol as foliar spray is banned. Captafol shall be used only as seed dresser. (S.O.569 (E) dated 25 <sup>th</sup> July, 1989) The manufacture of Captafol 80 % powder for dry seed treatment (DS) is banned for use in the country except manufacture for export. (S.O.679 (E) dated 17 <sup>th</sup> July, 2001)
3.	Cypermethrin	Cypermethrin 3 % Smoke Generator, is to be used only through Pest Control Operators and not allowed to be used by the General Public. [Order of Hon,ble High Court of Delhi in WP(C) 10052 of 2009 dated 14-07-2009 and LPA-429/2009 dated 08-09-2009]
4.	Dazomet	The use of Dazomet is not permitted on Tea. (S.O.3006 (E) dated 31 <sup>st</sup> Dec, 2008)
5.	Diazinon	Diazinon is banned for use in agriculture except for household use. (S.O.45 (E) dated 08 <sup>th</sup> Jan, 2008)
6.	Dichloro Diphenyl Trichloroethane (DDT)	The use of DDT for the domestic Public Health Programme is restricted up to 10,000 Metric Tonnes per annum, except in case of any major outbreak of epidemic. M/s Hindustan Insecticides Ltd., the sole manufacturer of DDT in the country may manufacture DDT for export to other countries for use in vector control for public health purpose. The export of DDT to Parties and State non-Parties shall be strictly in accordance with the paragraph 2(b) article 3 of the Stockholm Convention on Persistent Organic Pollutants (POPs). (S.O.295 (E) dated 8 <sup>th</sup> March, 2006) Use of DDT in Agriculture is withdrawn. In very special circumstances warranting the use of DDT for plant protection work, the state or central Govt. may purchase it directly from M/s Hindustan Insecticides Ltd. to be used under expert Governmental supervision. (S.O.378 (E) dated 26 <sup>th</sup> May, 1989)
7.	Fenitrothion	The use of Fenitrothion is banned in Agriculture except for locust control in scheduled desert area and public health. (S.O.706 (E) dated 03 <sup>rd</sup> May, 2007)
8.	Fenthion	The use of Fenthion is banned in Agriculture except for locust control, household and public health. (S.O.46 (E) dated 08 <sup>th</sup> Jan, 2008)
9.	Methoxy Ethyl Mercuric Chloride (MEMC)	The use of MEMC is banned completely except for seed treatment of potato and sugarcane. (S.O.681 (E) dated 17 <sup>th</sup> July, 2001)
10.	Methyl Bromide	Methyl Bromide may be used only by Govt./Govt. undertakings/Govt. Organizations / Pest control operators under the strict supervision of Govt. Experts or Experts whose expertise is approved by the Plant Protection Advisor to Govt. of India. [G.S.R.371 (E) dated 20 <sup>th</sup> May, 1999 and earlier RC decision]
11.	Methyl Parathion	Methyl Parathion 50 % EC and 2% DP formulations are banned for use on fruits and vegetables. (S.O.680 (E) dated 17 <sup>th</sup> July, 2001) The use of Methyl Parathion is permitted only on those crops approved by the Registration Committee where honeybees are not acting as a pollinators. (S.O.658 (E) dated 04 <sup>th</sup> Sep., 1992.)
12.	Monocrotophos	Monocrotophos is banned for use on vegetables. (S.O.1482 (E) dated 10 <sup>th</sup> Oct, 2005)
13.	Sodium Cyanide	The use of Sodium Cyanide shall be restricted for Fumigation of Cotton bales under expert supervision approved by the Plant Protection Advisor to Govt. of India.

**ANNEXURE IV**

**NAMES OF THE PESTICIDES IN THE NOTIFICATION S.O.4212 (E)**

S.No.	Name
1.	Benomyl
2.	Carbaryl
3.	Diazinon
4.	Fenarimol
5.	Fenthion
6.	Linuron
7.	MEMC
8.	Methyl Parathion
9.	Sodium Cyanide
10.	Thiometon
11.	Tridemorph
12.	Trifluralin
13.	Alachlor
14.	Dichlorvos
15.	Phorate,
16.	Phosphamidon
17.	Triazophos
18.	Trichlorfon

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