

**GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF HEALTH AND FAMILY WELFARE**

**RAJYA SABHA
UNSTARRED QUESTION NO.1558
TO BE ANSWERED ON 29TH NOVEMBER, 2016**

TOXIC ELEMENTS IN SOFT DRINKS

1558. SHRI MOTILAL VORA:

Will the Minister of **HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) whether the amount of toxic elements in many products of soft drink companies have been found in excess during the testing of soft drinks;
- (b) if so, the details thereof and the action taken by Government against the companies found guilty;
- (c) whether Government has informed the citizens about the presence of toxic elements in soft drinks of those companies, so that they would refrain from consuming them;
- (d) if so, the reasons therefor; and
- (e) the steps taken to prevent the ill effects of the said soft drinks among people?

**ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND
FAMILY WELFARE
(SHRI FAGGAN SINGH KULASTE)**

(a) to (e): Samples of food items are picked up for testing and analysis by the State/UT Food Safety Departments from time to time. Separate data about samples of soft drinks having been tested/found not conforming to specified standards, has not been compiled centrally. A study was conducted by the All India Institute of Hygiene and Public Health (AIIPH) and the National Test House (NTH), Kolkata, in which AIIPH collected 4 bottles each of the cold drink brands (Sprite, Coca Cola, Mountain dew, Pepsi and 7 UP) and tested for heavy metals antimony, lead, chromium and cadmium and DEHP. The study takes bottled (packaged) water as the reference point. Since a number of other substances are added while making soft drinks, its composition will be different from packaged drinking water. The details of the findings of the study are at Annexure.

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Annexure

Table: 1 Heavy metals and DEHP concentrations in Sprite (soft drink)

Item description: sample of Sprite (soft drink) in bottle (4x600 ml), Batch No. /LOT No. 2926					
Test Description (National Test House)	Certificate No.		Date of issue		Code No.
		NTH(ER)/CH(S)/2016/0029E		08/03/2016	
Storage Parameters	Toxic Substance (mg/l)				
	Antimony	Lead	Cadmium	chromium	DEHP
Sample in Bottle as received by the Lab.	0.015	0.007	0.003	0.015	0.016
40 deg C for 10 days.	0.019	0.009	0.006	0.016	0.019
60 deg C for 10 days	0.020	0.009	0.008	0.022	0.021
Permissible Limit	NA	NA	NA	NA	NA
Remarks Safety limits available for bottled water	0.005	0.010	0.003	0.050	0.006
Reference standards	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	US-EPA ⁽²⁾

Table: 2 Heavy metals and DEHP concentrations in Mountain Dew (soft drink):

Item description: sample of Mountain Dew received in 4 nos (600ml) bottles having Batches No./Lot No. BN5255C30J15					
Test Description (National Test House)	Certificate no.		Date of Issue		Code No.
	NTH(ER)/CH(S)/2016/0029C		08/03/2016		1454064260750
Storage Parameters	Toxic Substance (mg/L)				
	Antimony	Lead	Cadmium	chromium	DEHP
Sample in Bottle as received by the Lab.	0.012	0.006	0.016	0.017	0.014
40 deg C for 10 days.	0.018	0.007	0.019	0.017	0.016
60 deg C for 10 days	0.021	0.009	0.020	0.018	0.018
Permissible Limit	NA	NA	NA	NA	NA
Remarks Safety limits available for bottled water	0.005	0.010	0.003	0.050	0.006
Reference standards	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	US-EPA ⁽²⁾

Table: 3 Heavy metals and DEHP concentrations in Pepsi (soft drink):

Item description: sample of Pepsi (soft drink): received in bottle (4x600 ml), having Batch No./Lot No.5255C06J15					
Test Description (National Test House)	Certificate no.		Date of Issue	Code No.	
	NTH(ER)/CH(S)/2016/0029A		08/03/2016	1454064260750	
Storage Parameters	Toxic Substance (mg/L)				
	Antimony	Lead	Cadmium	chromium	DEHP
Sample in Bottle as received by the Lab.	0.029	0.011	0.002	0.017	0.028
40 deg C for 10 days.	0.032	0.012	0.006	0.019	0.033
60 deg C for 10 days	0.043	0.012	0.008	0.019	0.036
Permissible Limit	NA	NA	NA	NA	NA
Remarks Safety limits available for bottled water	0.005	0.010	0.003	0.050	0.006
Reference standards	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	US-EPA ⁽²⁾

Table: 4 Heavy metals and DEHP concentrations in 7 UP (soft drink):

Item description: sample of 7 UP(soft drink): received in bottle (600 ml), having Batch /Lot No.BN5255C23115					
Test Description (National Test House)	Certificate no.		Date of Issue		Code No.
	NTH(ER)/CH(S)/2016/0029B		08/03/2016		1454064260750
Storage Parameters	Toxic Substance (mg/L)				
	Antimony	Lead	Cadmium	chromium	DEHP
Sample in Bottle as received by the Lab.	0.011	0.004	0.012	0.017	0.018
40 deg C for 10 days.	0.011	0.006	0.018	0.022	0.020
60 deg C for 10 days	0.023	0.006	0.020	0.022	0.020
Permissible Limit	NA	NA	NA	NA	NA
Remarks Safety limits available for bottled water	0.005	0.010	0.003	0.050	0.006
Reference standards	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	US-EPA ⁽²⁾

Table: 5 Heavy metals and DEHP concentrations in Coca Cola (soft drink):

Item description: sample of Coca Cola(soft drink): received in bottle (600 ml) having Batch /Lot No.1263 (3 Bottles) & B.No. 1258 (1 Bottle)					
Test Description (National Test House)	Certificate no.		Date of Issue		Code No.
	NTH(ER)/CH(S)/2016/0029D		08/03/2016		1454064260750
Storage Parameters	Toxic Substance (mg/L)				
	Antimony	Lead	Cadmium	chromium	DEHP
Sample in Bottle as received by the Lab.	0.006	0.009	0.011	0.026	0.026
40 deg C for 10 days.	0.014	0.011	0.013	0.032	0.028
60 deg C for 10 days	0.019	0.012	0.013	0.033	0.034
Permissible Limit	NA	NA	NA	NA	NA
Remarks Safety limits available for bottled water	0.005	0.010	0.003	0.050	0.006
Reference standards	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	(BIS(IS 13428:2005, IS 14543: 2004) ¹	US-EPA ⁽²⁾

1. Bureau of Indian standards: Indian Standard Packaged natural mineral water specification (second revision) first reprint December 2006, Ics 13.060.20,c bls 200s Bureau of Indian Standards, Manak bhavan, 9 bahadur shah Zafar Marg, New Delhi 110002 is 13428: 2005
2. United States Environmental Protection Agency 2009, national Primary Drinking Water Regulations EPA 816-F-09-004 May 2009.