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CERTIFICATE

Leaching of DEHA and DEHP from PET Bottles to Water

Trace amount of leaching of DEHA and DEHP was observed in most of the water samples from various PET bottles irrespective of the condition (heating up to 60 °C for 48 h, without heating and under solar light for 48 h). DEHA concentration in the experimental samples varied between 0.001 and 0.0256 µg/L and DEHP concentration varied from 0.006 to 0.5320 µg/L. World Health Organization (WHO) guideline for drinking water with respect to DEHA and DEHP is presented in Table below.

WHO Guidelines for drinking water quality

S.No	Compounds	Observed Maximum Concentration, µg/L	Drinking water unit risk per µg/L	WHO Standard, µg/L	Exploitation of WHO guideline value
1	DEHA	0.0256	3.4×10^{-8}	80	0.032%
2	DEHP	0.5320	1.6×10^{-9}	8	6.65%

As per WHO guidelines for drinking water quality, the concentrations of DEHA and DEHP are well within the permissible limits

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To:

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