

:PULZE DOES NOT CREATE AIR QUALITY ISSUES

: WHAT HAPPENS WHEN YOU PULZE INDOORS?

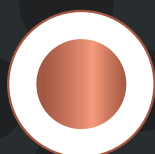
We measured chemicals of regulatory interest in the air **before, during** and **after** three people used Pulze in an office for 165 minutes¹



WHAT DID WE FIND?

NO MEASURABLE INCREASE IN NICOTINE

GLYCEROL 40% LOWER
THAN THE UK INDOOR AIR QUALITY STANDARD²



NO MEASURABLE INCREASE IN METALS

Air quality guidelines offer global guidance on thresholds and limits for key air pollutants that pose health risks⁴



NO MEASURABLE INCREASE IN CARBON MONOXIDE

FORMALDEHYDE 3X LOWER
THAN THE WHO³
INDOOR AIR QUALITY GUIDELINES



NO MEASURABLE INCREASE IN BENZENE

NO MEASURABLE INCREASE IN TSNA_s*

Whilst Pulze users should be courteous to those around them, our data suggests using Pulze is unlikely to present an air quality issue to bystanders when compared to workplace or general indoor air quality standards

Pulze doesn't produce side-stream smoke and users retain the majority of the nicotine they inhale



*Tobacco Specific Nitrosamines

¹Internal Data, Imperial Brands Science 2019
²HSE, Environmental Hygiene Guidance Note eh40/2005 Workplace Exposure Limits: Containing the List of Workplace Exposure Limits for Use with the Control of Substances Hazardous to Health Regulations (as Amended) 2nd ed. HSE, Liverpool, UK: 2011
³Kaden DA, Mandin C, Nielsen GD, et al. Formaldehyde. In: WHO Guidelines for Indoor Air Quality: Selected Pollutants. Geneva: World Health Organization; 2010. <https://bit.ly/2RBjN2h>
⁴World Health Organization <https://bit.ly/33ATXqs>