

FSSAI Asks States to Intensify Inspections and Carry Out Drives to Curb Use of Illegal Ripening Agents and Synthetic Coatings on Fruits

FSSAI Reinforces Ban on Use of Calcium Carbide for Artificial Ripening of Fruits

Press Release

New Delhi, 20th May, 2025: The Food Safety and Standards Authority of India (FSSAI) has urged all States and Union Territories to intensify inspections and carry out special enforcement drives to curb the illegal use of non-permitted fruit ripening agents, as well as colouring and coating of fruits with synthetic colours or non-permitted wax.

The Commissioners of Food Safety of all States/UTs and Regional Directors of FSSAI have been requested to maintain strict vigilance over fruit markets and mandis, to curb illegal use of fruit ripening using agents like calcium carbide, commonly known as 'masala'.

As part of the enforcement drive, inspection of go-downs and storage facilities, particularly those suspected of using substances like calcium carbide for ripening may be carried out. The presence of calcium carbide on the premises or stored alongside crates of fruits will be treated as circumstantial evidence against the Food Business Operator (FBO), potentially leading to prosecution under the Food Safety and Standards (FSS) Act 2006.

Calcium carbide is strictly prohibited for the artificial ripening of fruits under the Food Safety and Standards (Prohibition and Restrictions on Sales) Regulations, 2011. The use of this substance poses serious health risks and is known to cause mouth ulcers, gastric irritation and has carcinogenic properties.

Further, FSSAI has also identified cases where FBOs are using ethephon solution to artificially ripen bananas and other fruits by dipping them directly into the chemical. In this context, the Authority has issued a comprehensive guidance document titled "[Artificial Ripening of Fruits – Ethylene Gas: A Safe Fruit Ripener](#)"

(https://www.fssai.gov.in/upload/uploadfiles/files/Guidance_Note_Ver2_Artificial_Ripening_Fruits_03_01_2019_Revised_10_02_2020.pdf) . The document clearly states that ethephon may be used only as a source for generating ethylene gas and strictly in accordance with the prescribed Standard Operating Procedure (SOP). This SOP details all critical aspects of artificial ripening using ethylene gas, including restrictions, chamber requirements, handling conditions,

sources of ethylene gas, application protocols, post-treatment operations, and safety guidelines. FSSAI urges all Food Business Operators to adhere to these SOPs to ensure safe and compliant ripening practices.

FSSAI reiterates that any violation of these norms will attract strict penal action under the FSS Act, 2006. The Authority encourages all stakeholders in the supply chain including FBOs and consumers to remain vigilant and ensure that only safe and legally compliant fruits reach the market to ensure food safety and quality.
