



PS-64—2020

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POSITION STATEMENT

HANDLING CARBON DIOXIDE CYLINDERS PREVIOUSLY USED IN CANNABIS EXTRACTION OR WITH FOOD PRODUCTS CONTAINING CANNABIS

Background

The industry has become aware that carbon dioxide is being used as a solvent for extraction of oils from cannabis and hemp plants. There is increasing concern that cylinders used for these purposes are being returned with residual oils and placed into the same service or other services such as food, beverage, and medical.

Solvent extraction of oils from cannabis and hemp is one of several applications that presents a risk for contamination of the interior of the carbon dioxide cylinder. If the oils, or liquids containing oils, are drawn back into a cylinder and not detected and removed prior to the next refill of the cylinder, it can affect the product purity or cross contaminate products utilizing this cylinder.

This position statement does not address the:

- use of other gases such as propane or butane for extraction;
- legality of the cannabis industry in the United States or Canada;
- legality of the extraction processes; or
- legality of the use of gases in food products with cannabis as an ingredient.

Question

How does the industry ensure carbon dioxide cylinders that can contain residual cannabis or hemp oils are not subsequently filled without proper processing?

Answer

The industry follows best practices to ensure that subsequently filled cylinders do not contain residual cannabis or hemp oils. See CGA G-6.3, *Carbon Dioxide Cylinder Filling and Handling Procedures*, especially sections addressing prefill inspections and cylinder filling activities [1].

Risk of cylinder contamination with oil from cannabis and hemp shall be assessed by the firm filling the cylinder based on the market applications, known hazards, prior incidents, and/or available literature. Cannabis and hemp oil contamination could represent a personnel safety hazard for the cylinder filler, customer, and user; and/or a food safety hazard, see CGA F-2, *Guideline for Food Gases Product Hazard Analysis and Risk-Based Preventive Control (HARPC) Program* [2].

Based on the assessed hazard, preventive and/or mitigation measures shall be implemented and documented in a firm's written procedures. Some of these measures are identified in the cylinder filling section of CGA G-6.3 [1]. Alternative technologies that address and mitigate this particular contamination hazard may be used. All mitigation measures should be verified to ensure they meet the objective of reducing risk by identifying and removing any contamination.

CGA continues to evaluate industry best practices regarding contamination with oil from cannabis and hemp, identification, and mitigation of cylinders.

References

Unless otherwise specified, the latest edition shall apply.

[1] CGA G-6.3, *Carbon Dioxide Cylinder Filling and Handling Procedures*, Compressed Gas Association, Inc. www.cganet.com

[2] CGA F-2, *Guideline for Food Gases Product Hazard Analysis and Risk-Based Preventive Control (HARPC) Program*, Compressed Gas Association, Inc. www.cganet.com

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