



**Product Information Request: Liquid Nitrogen – Food Applications**

The following information is being sent in response to your questions regarding liquid nitrogen being used in food applications. Air Products and Chemicals, Inc. manufactures all of the liquid nitrogen from its merchant production plants in compliance with the Federal Food, Drug and Cosmetic Act including amendments required by the Food Safety Modernization Act and is in compliance with applicable sections of 21CFR110, cGMP for the Manufacturing, Packing, or Holding Human Food.

This liquid nitrogen meets the specifications listed in the Food Chemical Codex (FCC) for Nitrogen. Liquid nitrogen is also listed in 21CFR184.1540 as Direct Food Substances Affirmed as Generally Recognized as Safe (GRAS). This product meets the requirements of the USDA for use as Nitrogen oil free grade under the National Organic Program as described in 7 CFR Part 205.605.

All of APCI's Air Separation Units (ASUs) producing Nitrogen, Oxygen and Argon are ISO9001:2008 certified by a third party and has been ISO certified since 1992. Each of these plants is subject to audits for FDA and ISO9001 compliance.

In addition, APCI has registered all of its merchant production facilities in compliance with the Public Health Security and Bioterrorism Act of 2002, and is compliant with its applicable requirements.

Liquid nitrogen does not contain any allergens or other substances that would cause intolerances. We do not intentionally add these component(s) to Liquid Nitrogen and would not expect them to be present in liquid nitrogen.

Liquid nitrogen is gluten free, is not made from genetically-modified substances, does not contain and is not manufactured with materials sourced or derived from human, bovine (cow), porcine (pig), ovine (sheep) or caprine (goat) origin from animals born, raised or slaughtered in any country of the world.

This includes countries where Bovine Spongiform Encephalopathy (BSE) and Transmissible Spongiform Encephalopathy (TSE) are known to exist.

Kosher and Halal statuses are not applicable to the product liquid nitrogen.