

Frequently Asked Questions

Cryotech NAAC® Runway Deicer is an anhydrous sodium acetate that meets SAE AMS 1431 specification for solid runway deicers used by commercial airports and military bases. NAAC is exothermic, giving off heat as it dissolves thus resulting in faster melting of snow & ice.

Does the FAA approve solid runway deicers?

The FAA does not approve products for use airside. Instead, they offer guidance via Advisory Circulars (AC 150/5200-30C Airport Winter Safety and Operations) which specifies standards to be met for airside use. Solid deicing products must meet SAE AMS 1431 specifications in order to be considered approved for airside use.

What is SAE AMS 1431?

SAE AMS stands for Society of Automotive Engineers Aerospace Materials Specifications. Section 1431 addresses solid deicing/anti-icing compounds, including NAAC. It identifies the environmental properties, and the minimum standards for material compatibility and performance. In order to be considered approved for airside use, the FAA has established that independent laboratory testing and conformance to the SAE AMS 1431 specification as the standard test for solid deicers. Test results for Cryotech NAAC are available upon request.

Are any solid deicers considered non-corrosive?

Products claiming to be “non-corrosive” are technically inaccurate. NAAC is best described as being as corrosive as tap water, which is essentially non-corrosive. However, tap water can be corrosive to certain metals, under certain conditions when left unattended for extended periods of time.

Why are there a wide range of claims regarding working temperatures of various solid deicers?

It is important to understand whether one is comparing the Working temperature or the Eutectic temperature of a product. Eutectic temperature is the lowest possible temperature of solidification for any mixture, or the lowest freeze point temperature of a solution made from the solid. Working temperature is the lowest temperature where the product is effective. NAAC has a eutectic temperature of approximately -8°F (-22°C), and a working temperature of 0°F (-18°C). The working temperature is typically of more relevance for use and application.

Where do I find the listing of acceptable percentages of active ingredients for each solid deicer?

The chemical analysis for each solid deicer should be clearly stated in product literature and packaging. NAAC is 97% anhydrous sodium acetate.

How important is the bulk density of a solid deicer?

The more dense a product, the more deicer that can be stored in a given warehouse space. The bulk density of NAAC is 50 lb/ft³ to 54 lb/ft³.

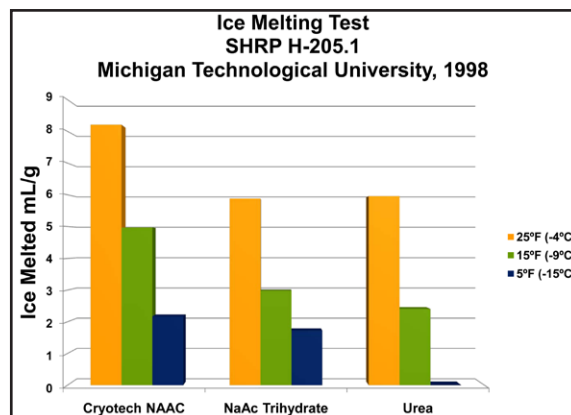
Why is the shape of the solid deicer so important?

The shape of a solid deicing product is critical to its effectiveness. The shape impacts product spreading, wind resistance, and dustiness. Irregular shaped granules/flakes, may lead to inconsistent, uneven spreading coverage and increased dustiness.

NAAC is a hard, spherical pellet manufactured utilizing Unipel technology. This technology lends to the pellets’ uniformity and durability. Unlike granular and flake products, it resists breaking when moving through the fan blade of the spreader, thus reducing dust and resulting in a more even application.

How was NAAC tested for effectiveness?

NAAC was tested to the SHRP H-205.1 method which measures ice melting capabilities. Test data is available upon request. It is important to ask for these test results in order to compare the effectiveness of two products. SHRP stands for Strategic Highway Research Program, which is part of the Transportation Research Board.



Where is NAAC manufactured?

NAAC is manufactured by Cryotech in the United States. NAAC may be shipped in 25kg (55 lbs) bags, 1000kg (2205 lbs) Super Sacks, or in bulk.

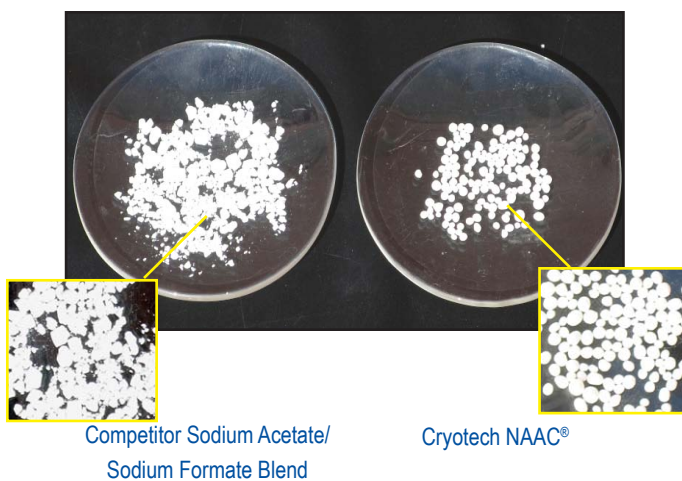
How important is storage facility selection for solid deicers?

Storage facility selection is critical in order to prevent cross contamination and ensure products remain approved to airside standards. Cryotech facilities and warehouses are ISO quality controlled and continuously monitored for compliance.

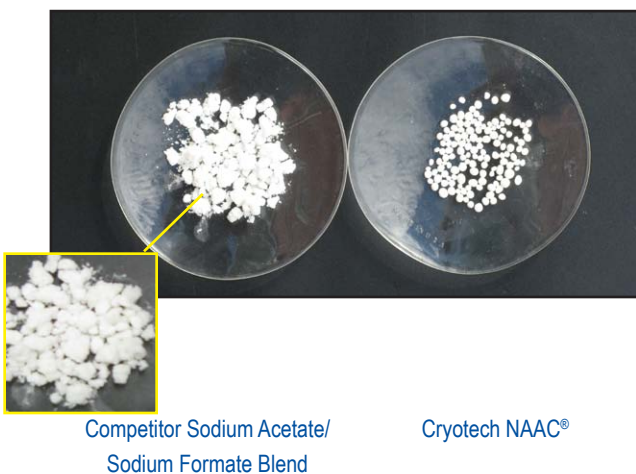
Does NAAC store well?

When keeping handling and moisture at a minimum, NAAC will store indefinitely. Storage guidelines are available upon request, or from our website. A trial was conducted where NAAC was stored for seven days, along with other solid deicers. They were exposed to air with a relative humidity of 50%. While the other solid deicers absorbed moisture and became brittle, NAAC pellets appeared unchanged. The below photos depict the results of this humidity experiment:

NORMAL STORAGE CONDITIONS



7 DAYS OF STORAGE IN 50% HUMIDITY



Does Cryotech evaluate carriers delivering NAAC?

Yes. As part of Cryotech's ISO 9001:2008 quality certification and vendor monitoring program, all carriers are evaluated prior to being approved as a Cryotech vendor. In addition to meeting all ISO policies and safety standards, at a minimum, all drivers must have a valid drivers license and truck registration for security purposes. A list of hazmat and TWIC approved carriers is available should customers or terminals need certification.

What product information and training is available?

Cryotech products are backed with complementary product information, certificate of analysis, training videos, and in-depth, on-site training. Contact Cryotech for product information and training.

What technical support is available for questions?

Cryotech offers a dedicated and experienced technical support group to promptly answer any questions.

What certifications should I look for when choosing a product?

When choosing a product it is important to ensure you are purchasing from a company with established quality processes. Cryotech is ISO certified to 9001:2008 & 14001:2004 Quality and Environmental standards, ensuring processes and products which meet rigorous international quality and environmental standards.

What is the future of solid runway deicers?

The EPA issued a proposed Effluent Limitations Guidelines in 2010. In these guidelines, the EPA is seeking to limit the amount of ammonia released into the environment by discontinuing the use of urea-based deicers. Ammonia, the principle pollutant released by these deicers, in very small amounts is extremely toxic to aquatic life. Also in 2010, the SAE AMS 1431B specification has been updated to SAE AMS 1431C. The updated specification includes AIR5567, the test method for catalytic carbon brake disk oxidation and LFV Method 2-98, the test method for asphalt concrete degradation resistance (valid for products in Europe).

TO ORDER NAAC OR FOR MORE INFORMATION CONTACT:

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