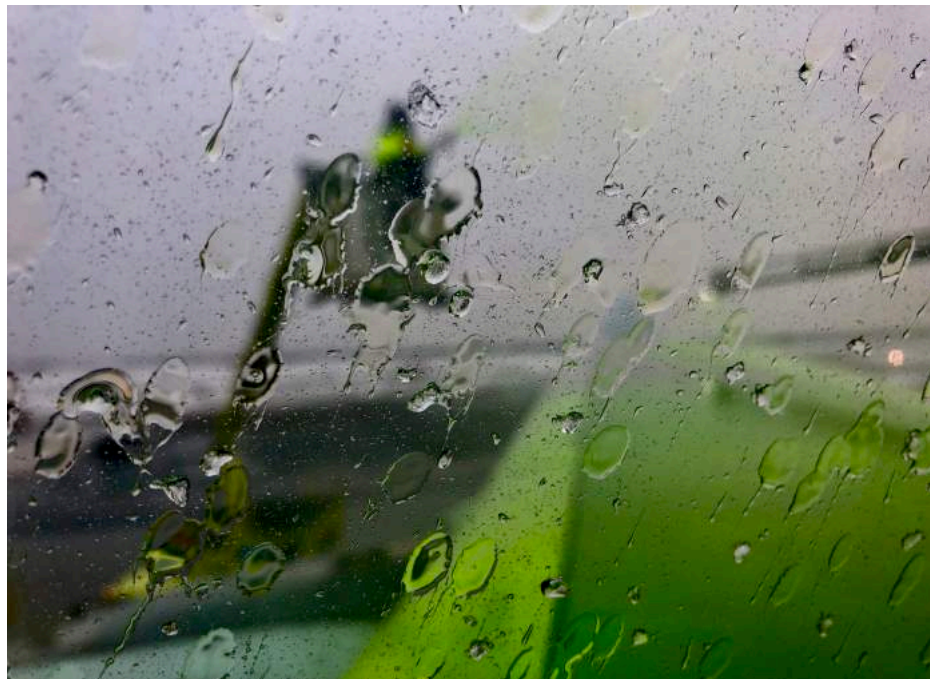




Product Guide



ClearWing EG

**SAE AMS 1428 Type IV
Aircraft Anti-Icing Fluid**

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1. About AllClear Systems, LLC

AllClear Systems, LLC (hereinafter AllClear) is a dynamic, customer-focused company providing aviation de/anti-icing products to the commercial and military sectors of the aviation industry, with a service-delivery ethos that is second to none.

Headquartered near Philadelphia, Pennsylvania, AllClear has extensive regional product manufacturing and logistics capability across North America.

2. The Product

AllClear's ClearWing EG is an Ethylene Glycol-based anti-icing fluid containing water, corrosion inhibitors, wetting agents, thickening agents and an emerald green dye. The fluid has been tested in accordance with Society of Automotive Engineers (SAE) Aerospace Material Specification (AMS) 1428, and has been fully qualified.

WARNING: ClearWing EG is supplied to customers as a neat (100%), ready to use product. The fluid **SHALL NOT** be diluted before use.

The details contained within this Product Guide were based on information believed to be reliable at the time of publication and are intended to provide general guidance on this product and its usage. All references within this document to third-party information were correct at the time of this document's publication.

AllClear Systems does not guarantee, expressly or implied, any specific properties of the product or the suitability of the product for a particular application. The user of the product must determine the product's suitability for the intended application and purpose. The user assumes all risk and liability in connection with the use of the product.

This Product Guide provides details and guidance information for the handling and use of ClearWing EG. The user of ClearWing EG shall ensure that the fluid is always employed in conjunction with the procedures and processes included in the latest version of SAE Aerospace Standard (AS) 6285 and all applicable service provider and/or air carrier de/anti-icing programs. The user of ClearWing EG shall also ensure that only properly trained personnel are employed to receive, handle and apply ClearWing EG to aircraft.

The user of ClearWing EG shall include applicable information from this Product Guide within employee training programs, to ensure company personnel are knowledgeable of product properties, handling considerations, limitations and performance characteristics, at a minimum.

This Product Guide (Version 1.0) is dated August 2019 and will remain in effect until a subsequent revision of the Product Guide is developed and made available on the www.allclearsys.com website. The user of the ClearWing EG shall always ensure that the most recent version of the Product Guide is employed and that all previously issued Product Guides are destroyed.

The user of ClearWing EG shall read this entire document and the associated Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) before receiving, handling or using ClearWing EG.

3. Delivery Options

ClearWing EG fluid can be obtained from AllClear in the following delivery formats:

- Bulk (typical volume, but can vary by region):
 - Tanker truckload up to ~32,000 litres (~8,450 US gallons)
 - ISO tank ~22,700 litres (~6,000 US gallons)
 - Railcar ~70,000 litres (~18,500 US gallons)
- IBC/Totes – ~1,000 litres (~265 US gallons)
- Drums – ~208 litres (~55 US gallons)

4. Product Development Testing and Qualification

SAE AMS 1428 establishes the testing and performance requirements for all Type IV anti-icing fluids used in aircraft ground de/anti-icing operations. AMS 1428 requires the conduct of extensive product testing, which measures the compatibility of materials used in aircraft construction with the fluid and establishes the compliance requirements for the physical properties of the fluid. In addition, AMS 1428 requires that anti-icing and aerodynamic

performance tests are performed and that minimum performance results are achieved.

ClearWing EG fluid has been fully tested by accredited independent laboratories and has been found to meet or exceed the requirements of SAE AMS 1428. A copy of the full Fluid Qualification Report for ClearWing EG can be obtained directly from AllClear upon request.

ClearWing EG is included on the Qualified Fluids List published by the Anti-Icing Materials International Laboratory (AMIL). The list can be found at the following location:

<https://amillaboratory.ca/aircraft-deanti-icing-fluids/qualified-fluids-lists/>

5. Regulatory Testing and Approval

Holdover Time is defined as the estimated time for which an anti-icing fluid will prevent the formation of frost or ice and the accumulation of snow on the treated surfaces of an aircraft.

ClearWing EG fluid was rigorously tested in accordance with SAE Aerospace Recommended Practice (ARP) 5485 to determine the endurance times of the fluid when subjected to various winter weather conditions. This test program was completed by an accredited independent laboratory and was supported by Transport Canada (TC) and the Federal Aviation Administration (FAA), resulting in the development of a fluid Holdover Time Table for ClearWing EG that was published by each regulator in their respective annual Holdover Time Updates. ClearWing EG has also been included on the TC and FAA lists of approved fluids.

The TC and FAA Holdover Time Updates, which include the lists of approved fluids and the fluid-specific Holdover Time Table for ClearWing EG, can be found at the following locations:

Transport Canada

www.tc.gc.ca/eng/civilaviation/standards/commerce-holdovertime-menu-1877.htm

Federal Aviation Administration

www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/deicing

The user of ClearWing EG shall always ensure that the most current version of the ClearWing EG Holdover Time Table is employed in operations, as these tables may change from year to year based on potential changes to test protocols, regulatory requirements or other considerations.

6. Operational Data Summary

ClearWing EG	
Composition	Ethylene Glycol-based liquid
Color	Emerald Green
Dilution	<u>Must Not Be Diluted</u>
<u>High Rotation Speed</u> <u>Take-off Aircraft</u>	
Lowest Operational Use Temperature	-29°C (-20°F)
Product Freeze Point	-40°C (-40°F)
Viscosity at 0°C (32°F)	
Production Range:	35,500 to 51,800 mPa.s
Lowest On-Wing Viscosity:	35,500 mPa.s
	Brookfield spindle SC4-31/13R, small sample adapter, 9 mL, 0°C, 0.3 rpm, 30.0 minutes
Application	Apply unheated , using only low shear nozzles and positive displacement or screw pumps. AllClear recommends that a schedule is established to conduct viscosity checks of sprayed fluid from each deicing unit.

7. Lowest Operational Use Temperature

The Lowest Operational Use Temperature (LOUT) for a Type IV fluid is defined as the higher (warmer) temperature of:

- The freezing point of the fluid plus the required freezing point buffer of 7°C (13°F); and
- The lowest temperature at which the fluid meets the aerodynamic acceptance test (determined in accordance to SAE AS 5900) for a given type of aircraft rotation speed (high-speed or low-speed).

Based on the results of testing conducted with ClearWing EG, the LOUT of ClearWing EG fluid for high-speed aircraft has been determined to be -29°C (-20°F).

The user of ClearWing EG shall ensure that the LOUT is respected at all times and that ClearWing EG is never applied to aircraft surfaces below this temperature.



8. Product Viscosity and Required Tests

ClearWing EG fluid is a thickened fluid with high viscosity designed to protect clean aircraft surfaces against the reformation of ice, frost and snow. The fluid is designed to remain on aircraft surfaces until the shear forces of the take-off roll are exerted upon the fluid. As such, the viscosity of the fluid plays a significant role in the overall performance of the fluid.

AllClear employs the following methodology for measuring and reporting the viscosities of ClearWing EG fluid:

- Brookfield LVT Viscometer, DV-II or equivalent, equipped with a small sample adapter and Spindle SC4-31/13R;
- Bubbles are removed from the fluid sample with a centrifuge;
- Temperature of the adapter is maintained at 0°C (32°F) using a constant temperature bath;
- 9 ml of centrifuged fluid is placed in the small sample adapter;
- The sample is allowed to cool to the desired test temperature of 0°C (32°F);
- The viscometer is started at a test speed of 0.3 RPM;
- The measurement (in millipascal-seconds or mPa.s) is recorded at precisely 30 minutes time.

The user of ClearWing EG should perform periodic measurements of fluid viscosity to ensure the quality of ClearWing EG used in operations, including pre-seasonal tests of fluid stored in tanks and vehicles.

9. Production Range Viscosity

The Production Range Viscosity for ClearWing EG fluid has a lower limit of 35,500 mPa.s and an upper limit of 51,800 mPa.s. ClearWing EG fluid received by the user shall always be within this defined range. More details on Product Delivery Acceptance will be provided in Section 12 of this Product Guide.

10. Lowest On-Wing Viscosity

The Lowest On-Wing Viscosity (LOWV) for ClearWing EG is the lowest viscosity at which the fluid-specific holdover times for ClearWing EG will apply. The LOWV for ClearWing EG, which is identified in the TC and FAA Holdover Time guidance material, is 35,500 mPa.s, using AllClear's recommended fluid viscosity measurement methodology (identified in Section 8 of this Product Guide).

SAE AS 6285 and global air carrier de/anti-icing programs require that testing is performed on an annual basis to ensure that de/anti-icing vehicles used in operations do not shear Type IV fluids below the LOWV. These tests are vital to ensure the performance of ClearWing EG. The user of the fluid shall perform tests and collect samples according to procedures included in AS 6285 and/or the carrier programs. These samples shall then be tested for viscosity using AllClear's recommended viscosity measurement methodology. Alternatively, fluid samples may be collected and sent to AllClear for measurement.

Tests to determine compliance of fluid sprayed through de/anti-icing vehicles with the documented LOWV should be performed a minimum of one time annually prior to the onset of the season, but air carriers and other end users may also require additional testing at various points during the year or whenever equipment is repaired or new equipment is introduced. For more details on spray tests, consult the various air carrier programs or contact an AllClear representative for guidance.

11. Storage and Handling

It is very important that ClearWing EG is stored and handled correctly to prevent degradation and the potential for performance reduction.

11.1 Product Safety

The user shall always consult the latest MSDS or SDS, as appropriate to local jurisdiction, before handling the ClearWing EG product. All necessary steps to ensure that this product is used safely and in an environmentally responsible manner consistent with all applicable regulations shall be observed.

Regulations and use conditions are subject to change by government, state, provincial and local authorities. It is the user's responsibility to determine that the available information is appropriate and complete in order to comply with the applicable laws and regulations in force at the time and place of use.

The user should provide all applicable information to its employees, contractors, customers, or any other users of the product, and request that they do the same.

Areas sprayed with glycol-based products may become slippery. Caution shall be maintained while operating equipment or walking on areas exposed to these products. Even areas only affected by overspray or dripping should be treated with the same caution. Before you enter vehicles, aircraft or buildings, wipe your feet and be aware that vehicles, and even foot traffic, can cause other areas to become slippery. If vacuum trucks are available, they can remove excess accumulations on the ground. If further ground cleanup is required using solid or absorbent materials, ensure that it is quickly removed and disposed of in accordance with the regulations in force at your location.

11.2 Storage Vessels

ClearWing EG should only be stored in vessels made from either stainless steel, or light colored opaque high-density polyethylene (dark colors can generate higher internal tank temperatures due to sunlight exposure). Other materials may be considered on a case-by-case basis, subject to receipt of written approval from AllClear.

All storage vessels (bulk, tote and drum) and associated pumps, piping and hoses should be kept in a well-maintained and clean condition.

When supplied in totes and drums, it is preferable for these storage units to be stored inside a dry building with all fill and drain ports protected against damage. They should be kept away from direct heat sources.

Totes should be shielded from sources of Ultraviolet (UV) light, which include fluorescent lights and sunlight. If this is not possible, storage units should be fully covered to prevent UV exposure. Failure to do so may result in the product dye color fading and possibly also cause a decrease in product viscosity.

ClearWing EG is not corrosive and will not damage materials commonly used for storage tanks, pumps, fittings and transfer lines, as well as many gasket, seal and hose elastomers. Avoid using dissimilar metals in contact with each other as galvanic action can occur, which may degrade the fluid. Some, but not all, symptoms of galvanic action occurring may be indicated by the presence of gels or light residues.

11.3 Piping and Hoses

All piping and hoses should be dedicated solely for use with this product, clearly labeled, color-coded and well maintained. A minimum pipe or hose diameter of 8 centimeters (3 inches) is recommended.

It is recommended that fixed piping used for this product is made from stainless steel. The piping surfaces should be smooth, and sharp bends must be avoided. Again, be aware of the use of dissimilar metals and the potential for galvanic action to degrade the fluid.

Flexible hoses approved for use with either petroleum-based products or chemical solvents should be used. Hose fittings should be capped when not in use and stored off the ground to keep them free from contaminants.

11.4 Pumping and Handling

It is preferable for either Compressed Air or Gravity to be used to transfer ClearWing EG. If this is not possible, then low-shear diaphragm or progressive cavity pumps must be used. Product circulation should be limited as extended use may cause degradation.

ClearWing EG should not be filtered as an increase in shear potential may result in viscosity degradation.

11.5 Maintaining Product Integrity

All fluid storage vessels or deicing unit tanks should be clean, dry and stain free prior to initially filling with ClearWing EG. **Do not** mix ClearWing EG with any other product. **Do not dilute ClearWing EG** before use. Tank access hatches and fill/dispense ports should be properly closed and sealed to prevent ingress of foreign matter.

Once ClearWing EG has been loaded into a de/anti-icing vehicle or spray equipment, it must not be transferred back into a storage tank, tote, drum or

similar vessel that contains fresh ClearWing EG. This will prevent the possibility of contamination in the deicing application equipment from degrading the fresh product in the storage vessel.

ClearWing EG must be stored unheated.

The dye in ClearWing EG is designed to degrade upon exposure to UV light, causing the product color to gradually fade. This color loss is most noticeable in sight level tubes used on storage tanks or deicing trucks and these shouldn't be used as the sole means of determining the appearance of the fluid inside the tank. Exposure to UV light may also cause a decrease in product viscosity.

If the integrity of the product is in doubt, the user should contact AllClear for guidance.

11.6 Storage Stability

Provided that storage requirements are adhered to, under normal ambient conditions the shelf life of ClearWing EG will exceed one year. It is recommended that, at a minimum, product samples are quality tested against AllClear specifications prior to use at the start of each deicing season. Each company or customer may also specify that a more frequent schedule is adopted.



12. Product Delivery Acceptance

Prior to accepting delivery of ClearWing EG, the user shall confirm that:

- All delivery vessel port caps are secured with identifiable tamper proof seals that match the delivery documentation;
- All delivery documentation/labeling refers to ClearWing EG;
- The product complies with the test parameters described on the delivery Certificate of Analysis (C of A), in accordance with the product acceptance procedures employed by the user or specified by the air carriers. The following table summarizes the C of A acceptance criteria.

ClearWing EG	
Base Composition	Ethylene Glycol
Appearance	Emerald Green colored liquid, free from any visible impurities. Air bubbles may be present.
pH at 20°C	7.0 – 8.0
BRIX at 20°C	30.0 – 33.0
Refractive Index at 20°C	1.3812 to 1.3866
Viscosity at 0 °C Note: Delivery only.	35,500 – 51,800 mPa.s Brookfield spindle SC4-31/13R. Small sample adapter, 9 mL, 0°C, 0.3 rpm, 30.0 minutes
If any test results are out of range, <u>do not use</u>; contact AllClear immediately.	

12.1 Refractometers

While laboratories use specialized equipment and procedures to determine fluid refractive index, or degrees Brix, this is not necessarily practical for testing during winter operations on the airport. In the field, temperature-compensated, correctly calibrated, portable refractometers are more convenient for operational usage. Do not use hydrometers on AllClear products.

The user should contact AllClear for guidance on obtaining a suitable refractometer model for use with AllClear products.

The user should always comply with the refractometer manufacturer's requirements for the maintenance and calibration schedule of the selected refractometer, as well as its proper care and use.

13. Product Usage

13.1 Introduction

Aircraft manufacturers provide recommendations for the de/anti-icing their aircraft models in maintenance and operating manuals. Additionally, aviation regulators, such as TC and the FAA, require air operators to have a regulator approved Ground Icing Operations Program. Industry standards, material specifications and recommended practices published by SAE are employed generally as the basis for these programs, and should be adhered by the user of ClearWing EG.

Environmental considerations may need to be adopted depending on Federal, State/Provincial and Local agency requirements at the airport location.

Consideration should be given to the suitability of the de/anti-icing location with respect to all applicable airport operational and environmental factors.

CAUTION: As with any aircraft deicing or anti-icing process, only personnel who have been properly trained in the use of ClearWing EG fluid in accordance with the requirements of applicable approved Ground Icing Operations Program should be employed. Personnel should also be kept up to date on revised ClearWing EG technical material as provided from time to time by AllClear.

13.2 Product Strength

ClearWing EG must only be used in an undiluted state. This is defined as the fluid being in a "Neat" condition (undiluted as shipped by the fluid manufacturer). Dilution is not permitted as the fluid protection time performance has been determined based upon independent testing of the "Neat" fluid. Holdover times do not exist for dilutions of this product.

When reporting the fluid strength to aircraft flight crews as part of the communication of the anti-icing code, this could be stated as "AllClear Systems, ClearWing EG Type IV, 100%". The user should always follow accepted or customer communication requirements at all times.

13.3 Precautions

- a) ClearWing EG is only to be applied unheated and is recommended for application on aircraft exterior surfaces only.
- b) Prior to any individual piece of deicing equipment being filled with ClearWing EG for the first time, and prior to it being used to anti-ice an aircraft, the user should ensure:
 - i. That the anti-icing fluid storage tank, associated pump(s), valves, pipes, hoses and nozzles have been thoroughly cleaned to remove all traces of prior products or foreign contaminants. Once filled, operate the fluid spray system until a steady stream of clean ClearWing EG is viewed at the nozzle;
 - ii. That all local safety and environmental regulations in effect for test spraying an Ethylene Glycol based product shall be complied with; and
 - iii. That fluid samples from the spray nozzle are collected and returned to AllClear for verification of fluid viscosity with the ClearWing EG specification.
- c) Following any subsequent major deicing equipment pumping and spraying system maintenance, and prior to the equipment being used to anti-ice an aircraft, ensure that in addition to a system cleanliness check, fluid samples are taken from the spray nozzle and returned to AllClear for verification of fluid viscosity with the ClearWing EG specification.
- d) ClearWing EG should not be used on:

- Helicopters (unless approved by the helicopter manufacturer);
 - Areas designated by the aircraft manufacturer as no-spray zones. The user of ClearWing EG should refer to air carrier programs or SAE 6286 for more details on aircraft diagrams and no-spray zones. Common examples have historically been, but are not limited to, cockpit windows, aircraft brakes, engine/auxiliary power unit inlets and exhausts, passenger or cargo door gaps, systems inlets or vents, instrument sensors etc.;
 - Runways;
 - Pavement;
 - Roadways;
 - Sidewalks;
 - Vehicles; or
 - Ground Support Equipment.
- e) ClearWing EG should not be used as antifreeze for:
- Vehicles;
 - Ground Support Equipment;
 - Sanitary Water Facilities; or
 - Aircraft or Portable Lavatories.
- f) ClearWing EG should not be applied using forced air application systems. Some de/anti-icing vehicles have forced air application systems that are designed to reduce the amount of fluid required for deicing operations. These trucks may either inject the fluid into the airstream, or on top of it. Applying anti-icing fluids using forced air assistance can seriously degrade the viscosity of the product to the point that it may not conform to its original qualification parameters. Forced air application may also result in a thinner or uneven coating of fluid on the wing. Additionally, holdover times have not yet been established for ClearWing EG applied with forced air assistance equipment.
- g) Some aircraft operators may allow the application of anti-icing fluid to uncontaminated aircraft surfaces if freezing precipitation is not present, but is expected to start prior to the scheduled departure time. This

preventative practice can minimize the possibility of snow and ice bonding, or reduce the accumulation of frozen precipitation on aircraft surfaces making subsequent deicing easier, although it does increase the potential of building up dried product residues.

If this preventative practice is allowed by the air operator's approved Ground Icing Operations Program, care should be taken to ensure that any applicable holdover times are not exceeded. In the event that the expected holdover time will be exceeded, the aircraft should be thoroughly deiced before flight using heated Type I and then anti-iced as appropriate for the conditions.

13.4 Application Guidance

The following guidance is provided for general information purposes only. The user is responsible for employing correct application procedures compliant with SAE standards, regulatory requirements, airframe manufacturer requirements and customer de/anti-icing program requirements.

ClearWing EG Type IV anti-icing fluid has been designed for use as either:

1. The second step of a two-step de/anti-icing process following correct application of AllClear Lift-Off Type I deicing fluid heated to 60°C to 82°C (140°F to 180°F).
 - **CAUTION:** The use of ClearWing EG with other SAE AMS1424 Type I deicers must be discussed with AllClear prior to use.
2. A standalone anti-icing fluid applied on a clean aircraft.

ClearWing EG should be:

- Applied unheated, using only low shear nozzles and positive displacement or screw pumps;
- Applied only after a check to confirm that the applicable aircraft surfaces are clean in accordance with all applicable programs, regulations and procedures;
- Applied in sufficient quantity to ensure a stabilized thickness of fluid of 1 to 3 millimeters on aircraft surfaces. For more information on

suggested spray quantities for various aircraft types, the user of ClearWing EG should consult the air carrier programs or SAE AS 6286.

General ClearWing EG Application Tips:

Using a low-shear pumping system and nozzle, ClearWing EG should be applied with a reduced flow rate and a fan spray setting to lay an even coating over the surface being treated. High fluid pressures and flow rates can be detrimental to this product reducing fluid viscosity and resulting in reduced fluid holdover performance.

Proper and uniform coverage should be ensured by applying a sufficient quantity to completely remove any remaining Type I fluid. Aircraft surfaces should be coated to a depth of 1 to 3 millimeters. Insufficient application will result in a thin layer and reduced holdover protection.

ClearWing EG will quickly provide even and effective coverage.

After spraying an area, the user should take a moment to see how the fluid is flowing to provide the required coverage. ClearWing EG's flow properties may differ from those of previous fluids employed by the user.

Two-Step De/Anti-Icing Operations

This process is generally used when frozen deposits are required to be removed from the aircraft and active freezing precipitation is either occurring or is expected before take-off of the aircraft.

- First step: AllClear Lift-Off Type I deicing fluid shall be used to clean the aircraft surfaces in accordance with the procedural and inspection requirements of the approved Ground Icing Operations Program in effect for the aircraft. The Type I fluid should be heated to 60°C to 82°C.
- Second step: After the Type I application has been satisfactorily completed and the required aircraft surfaces are clean, ClearWing EG should be applied to the clean surfaces typically within 3 minutes of the Type I application and prior to the onset of any refreezing of the Type I fluid. Unheated, undiluted ClearWing EG anti-icing fluid should

be applied in sufficient quantity to the required aircraft surfaces to adequately displace any Type I used in the first step and also to form a layer of suitable thickness to provide adequate protection.

One-Step Anti-Icing Operations

While not a common practice, this process is sometimes used as a preventative measure on clean aircraft surfaces prior to the start of active precipitation. Examples of using this practice might be, but are not limited to, when frost or freezing precipitation is expected to start or when fluid is applied to clean aircraft surfaces in a hangar.

CAUTION: Do not use ClearWing EG on an aircraft that still has contamination present on its surfaces.

CAUTION: In one-step anti-icing operations, the holdover time of ClearWing EG always starts upon first application of the anti-icing fluid, even when active precipitation has yet to start. The anti-icing fluid should be removed with heated Type I prior to the next take-off if either:

- The applicable holdover time has expired; or
- The required inspection of pre-treated aircraft surfaces identifies contamination prior to the departure of the aircraft.

CAUTION: In the event that ClearWing EG is applied in the hangar to clean aircraft surfaces and the fluid holdover time is exceeded, the failed fluid needs to be removed from the aircraft using an acceptable process or heated Type I fluid (if available) and the one-step anti-icing process needs to be repeated, if required.

Monitoring Fluid Effectiveness

ClearWing EG is designed to absorb and melt precipitation in order to prevent recontamination occurring on aircraft surfaces for a period of time known as holdover time. As with any SAE deicing or anti-icing fluid, continued exposure to precipitation after application will dilute the fluid and will eventually cause the fluid to lose its effectiveness in preventing frozen contamination from reforming.

It is important that both Flight and Ground personnel are trained to recognize when this might be about to happen, or has happened. A fluid will typically

start to lose its gloss and dye when it is losing its effectiveness. At this point it may be close to providing inadequate protection, so it is important to also look for signs of snow or ice accumulation, surface freezing, build-up of ice crystals in or on the fluid, or the presence of slush. A pre-takeoff check, or if necessary, a pre-takeoff contamination check is the only way to determine if an aircraft is free of contamination prior to take off.

13.5 Anti-Icing Fluid Runoff and Mitigation

Anti-icing fluid runoff mitigation control measures may be required at your airport. ClearWing EG is produced using high-quality Ethylene Glycol, and therefore complying with any required mitigation measures may be simplified when it is used in conjunction with AllClear's Ethylene Glycol-based Type I deicing fluid.

All applicable authorities should be consulted to assure compliance with federal, state, provincial and local laws as appropriate. It is the responsibility of the user to determine and ensure compliance with all applicable legal requirements.

Fluid runoff will contain additional materials that are not present in the products when they are supplied by AllClear. Such runoff should be tested to determine its material composition and the measures needed to dispose of it in order to comply with the applicable legal requirements.

