



AVIATION LABORATORIES, INC.  
MATERIAL SAFETY DATA SHEET

Section 1 - Product Identification and Use

Manufacturer's Name  
Aviation Laboratories, Inc.

Trade Name:  
AVL TKS Anti-Icing  
De-Icing Fluid

Address (Number Street)  
5401 Mitchelldale #B-6

Chemical Family:  
Glycol-Alcohol Solution

Address (City, State, Zip)  
Houston, TX 77092

Part Numbers:  
AVL - TKS

Telephone Number: (713) 864-6677

Emergency Telephone Number:

1-800-424-9300 Chemtrec

Outside U.S.A. (202) 483-7616

Hazardous Materials Description and proper shipping name (49CFR172.101):

Flammable Liquid, n.o.s., CLASS 65

Class 3, UN 1993

TSCA Inventory:

All of the ingredients are listed

in the TSCA inventory.

HMIS Labeling

Health: 1

Flammability: 2

Reactivity: 0

Section 2 - Hazardous Ingredients/Identity Information

| Ingredients       | CAS Number | %WW | OSHA PEL | TLV    |
|-------------------|------------|-----|----------|--------|
| Ethylene Glycol   | 107-21-1   | 85  | 50ppm    | 50ppm  |
| Isopropyl Alcohol | 67-63-0    | <10 | 400ppm   | 400ppm |

Section 3 - Physical/Chemical Characteristics

Boiling Point: (°F): 256 °F      Specific gravity (H<sub>2</sub>O=1): 1.095  
 Vapor pressure (mmHg) @20 °C: 9.4      Percent volatile by volume (%): 95  
 Vapor density (Air=1): 2.5      Evaporation rate (Butyl Acetate=1): >1.0  
 Solubility in water: 100%

Appearance and odor: Clear, colorless liquid with faint alcohol odor.

Section 4 - Fire and Explosion Hazard

Flash point (method used): 130°F ASTM 93      Flammable limits (by volume 25°C):  
 LEL: 2.0%      UEL: 12.7%

Extinguishing media: Water, foam, dry chemical, carbon dioxide.

Special fire fighting procedures: Do not spray fire directly. A solid stream of water directed into hot, burning liquid can cause frothing. Use self-contained breathing apparatus and protective clothing.

Unusual fire and explosive hazards: None.

N.E. = Not established  
N.A. = Not applicable

## Section 5 - Health Hazard Data

**Permissible Exposure Level (PEL): 50 ppm**  
**Threshold Limit Value (TLV): 50 ppm**

**Health hazard/effects of over exposure:**

**Inhalation:** Excessive inhalation of vapors can cause nasal and respiratory irritation.  
**Eyes:** Can cause irritation, redness and tearing.  
**Skin:** Repeated or prolonged contact may cause irritation.  
**Ingestion:** May cause abdominal discomfort and pain, dizziness, lumbar pain and central nervous system depression. Severe kidney damage accompanies gross overexposure.

**Medical conditions aggravated by exposure:** Inhalation of mists may produce signs of central nervous system effects, particularly dizziness.

**Emergency and first aid procedures:**

**Inhalation:** Move individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped give artificial respiration. Keep person warm, quiet and get medical attention.  
**Eyes:** Flush eyes with plenty of water, lifting upper and lower lids occasionally. Get medical attention.  
**Skin:** Remove contaminated clothing and thoroughly wash exposed area with soap and water. Launder contaminated clothing before reuse.  
**Ingestion:** If conscious, give two glasses of water, induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.

## Section 6 - Reactivity Data

**Stability:** Stable      **Conditions to avoid:** Avoid contact with open flame, excessive heat or sparks.  
**Incompatibility (Materials to avoid):** Strong oxidizing agents (e.g. nitric sulfuric acids, permanganates).  
**Hazardous decomposition products:** Burning may cause toxic materials: Carbon dioxide or carbon monoxide.  
**Hazardous polymerization:** Will not occur.

## Section 7 - Precautions for Safe Handling and Use

**Precautions to be taken in case material is released or spilled:** Evacuate the area, ventilate and avoid breathing vapors. Remove leaking container and transfer remaining product to another vessel. Prevent product from going into sewers and water sources by diking or impounding. Using appropriate safety equipment, mop up or soak up with absorbent material, such as sand or clay.

**Waste disposal methods:** Incinerate in a furnace where permitted under appropriate federal, state and local regulations.

**RCRA Hazardous Waste No.:** D001.

**CERCLA Reportable Quantity:** N.A.

**SARA TITLE III Chemical:** Yes, CAS# 107-21-1 and 67-63-0.

**Precautions to be taken in handling and storage:** Store away from heat, sparks or open flame. May be fatal if swallowed. Do not breath mist. Avoid breathing vapors or contact with eyes. Wash thoroughly after handling. Keep container closed. Do not store in open or unlabeled containers.

### FOR INDUSTRIAL USE ONLY

Where heavy concentrations of a fine mist are present, a respirator should be used to prevent inhaling mist particles. Containers of this material may be hazardous when emptied. Since emptied containers retain residues all hazard precautions given in this data sheet must be observed.

## Section 8 - Control Measures

**Respiratory Protection:** None required if good ventilation is maintained. If vapor concentration rises above TLV, use NIOSH approved organic vapor cartridge. For large spills or emergencies in completely closed areas, use self contained breathing apparatus.

**Ventilation:** Do not use in closed or confined areas. Use mechanical ventilation to maintain exposure levels below 50 ppm.

**Protective gloves:** Use solvent resistant gloves for liquid handling.

**Eye protection:** For spraying or splashing of solvent, use face shield or goggles. Contact lenses should not be worn.

**Other protective equipment:** As necessary to prevent prolonged or repeated skin contact.

**Hygienic practices:** Wash hands with soap and water after use and/or before breaks, lunch and at the end of work periods. Remove contaminated clothing and launder before reuse.