



SAFETY DATA SHEET
Kilfrost Windscreen Washing Fluid 3 (WWF MOD 3)

According to ANSI Z-400. 1-2004

1. IDENTIFICATION

Product Name Kilfrost Windscreen Washing Fluid 3 (WWF MOD 3)
Identified uses Windscreen wash fluid to remove ice, insect debris and salt spray from military aircraft screens. AL - 36 (DTD900/4939B)
Supplier Kilfrost Inc
1801 North Military Trail
Suite 201
Boca Raton
Florida 33431
USA
Working Hours: 954 282 5050
FAX: 954 282 5049
Email: infoamericas@kilfrost.com
Emergency Telephone Kilfrost Inc. Emergency Tel: 954 558 7268 or 954 756 5645

For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2. HAZARD(S) IDENTIFICATION

No other information noted.

Appearance Clear liquid.
Color Colourless.
Odor Characteristic.
GHS Pictogram



Signal Word Warning

Hazard Statements
H302 Harmful if swallowed.
H373 May cause damage to organs Kidneys through prolonged or repeated exposure if swallowed.

Precautionary Statements
P102 Keep out of reach of children.
P270 Do not eat, drink or smoke when using this product.
P260 Do not breathe vapour/spray.
P264 Wash contaminated skin thoroughly after handling.
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local regulations.

Contains ETHANEDIOL

Kilfrost Windscreen Washing Fluid 3 (WWF MOD 3)**GHS Classification**

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H302;STOT RE 2 - H373
Environment	Not classified.

Ingestion

Harmful if swallowed. May cause stomach pain or vomiting.

Skin Contact

Slightly irritating.

Eye Contact

Irritating and may cause redness and pain.

3. COMPOSITION/INFORMATION ON INGREDIENTS**ETHANEDIOL****30-60%****CAS No.: 107-21-1****EC No.: 203-473-3**

GHS Classification

Acute Tox. 4 - H302; STOT RE 2 - H373

4. FIRST-AID MEASURES**Description of first aid measures****General Information**

Treat Symptomatically.

Inhalation

Move the exposed person to fresh air at once. Get medical attention.

Ingestion

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

Skin Contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye Contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed**Inhalation**

Irritation of nose, throat and airway.

Ingestion

May cause discomfort if swallowed. Sore throat. May cause stomach pain or vomiting.

Skin Contact

Prolonged skin contact may cause redness and irritation.

Eye Contact

Irritating and may cause redness and pain.

Indication of any immediate medical attention and special treatment needed**Notes To The Physician**

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C) 410

Flash point (°C) None below 100 CC (Closed cup).
Material boiling extinguished flame

Extinguishing Media

Use fire-extinguishing media appropriate for surrounding materials.

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Special Fire Fighting Procedures

Water spray should be used to cool containers.

Kilfrost Windscreen Washing Fluid 3 (WWF MOD 3)

Protective Equipment For Fire-Fighters

Use protective equipment appropriate for surrounding materials.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

For personal protection, see section 8.

Environmental Precautions

Collect and dispose of spillage as indicated in section 13. Avoid discharge to the aquatic environment.

Spill Clean Up Methods

Absorb spillage with non-combustible, absorbent material. Collect in containers and seal securely. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery. For waste disposal, see section 13.

Reference to other sections

For personal protection, see section 8. Collect and dispose of spillage as indicated in section 13.

7. HANDLING AND STORAGE

Handling

Avoid inhalation of spray mist and contact with skin and eyes.

Storage

Store in tightly closed original container in a dry, cool and well-ventilated place.

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	STD	TWA (8-hrs)	STEL (15 min)	Notes
ETHANEDIOL		100 mg/m3		A4, C

A4: Not Classifiable as a Human Carcinogen.
Ceiling limit

Protective Equipment



Process Conditions

Provide eyewash station.

Engineering Measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of spray.

Respiratory Equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand Protection

Use protective gloves.

Eye Protection

Wear tight-fitting goggles or face shield.

Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene Measures

When using do not eat, drink or smoke. Wash hands after handling. Wash contaminated clothing before reuse.

Environmental Exposure Controls

Keep container tightly sealed when not in use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear liquid.
Color	Colourless.
Odor	Characteristic.
Solubility	Miscible with water
Initial boiling point and boiling range (°C)	103 @ 760 mm Hg

Kilfrost Windscreen Washing Fluid 3 (WWF MOD 3)

Relative density	1.05 - 1.06 @ 20 Calculation method
Vapor density (air=1)	1.0
Vapor pressure	13.9 mm Hg @ 20 Calculation method
pH-Value, Conc. Solution	7.25 - 8.25
Viscosity	5 - 10 mPas @ 20
Flash point (°C)	None below 100 CC (Closed cup). Material boiling extinguished flame
Auto Ignition Temperature (°C)	410
Freezing Point (°C)	-34

10. STABILITY AND REACTIVITY**Reactivity**

No specific reactivity hazards associated with this product.

Stability

Stable under normal temperature conditions and recommended use.

Not relevant

Conditions To Avoid

No specific conditions are likely to result in a hazardous situation.

Materials To Avoid

Strong oxidizing substances.

Hazardous Decomposition Products

None under normal conditions. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION**Acute toxicity:****Acute Toxicity (Oral LD50)**

> 5000 mg/kg Rat

Estimated Value

12. ECOLOGICAL INFORMATION**Acute Fish Toxicity**

No information available.

Degradability

The product is expected to be biodegradable.

Bioaccumulative potential

No data available on bioaccumulation.

Mobility:

The product is miscible with water. May spread in water systems.

Results of PBT and vPvB assessment

No data available.

Other adverse effects

Not determined.

13. DISPOSAL CONSIDERATIONS**Waste Management**

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

Disposal Methods

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION**General**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).

Transport Labels

No transport warning sign required.

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Environmentally Hazardous Substance/Marine Pollutant

No.

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes

Not applicable.

15. REGULATORY INFORMATION

US Federal Regulations

US State Regulations

US - TSCA

All ingredients are listed

16. OTHER INFORMATION

General Information

Only trained personnel should use this material.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 04/08/2014

Revision 2

Supersedes Date 09/03/2013

Material Safety Data Sheet Status Approved.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.