



SAFETY DATA SHEET

1. Identification

Product identifier INSTRUMENT AF 50/50 ETHANOL/PG

Other means of identification

Product code 337XX

Recommended use Winterizing anti-freeze.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name Star brite Distributing, Inc.

Address 4041 SW 47th Avenue
Fort Lauderdale, FL 33314 US
US

Telephone General Information: (954) 587-6280

E-mail Not available.

Contact person Vincent Waclawek

Emergency phone number 24-Hour Emergency: CHEMTREC: (703) 527-3887
or (800) 424-9300

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3

Health hazards Serious eye damage/eye irritation Category 2A
Specific target organ toxicity, single exposure Category 1 (central nervous system, eyes)

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Flammable liquid and vapor. Causes serious eye irritation. Causes damage to organs (Central nervous system, eyes).

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist or vapor. Wash thoroughly after handling.

Response In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Call a poison center/doctor/.

Storage Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Ethanol	64-17-5	30 - 60
Propylene glycol	57-55-6	30 - 60

4. First-aid measures

Inhalation	If symptomatic, move to fresh air. Get medical attention if symptoms persist.
Skin contact	Wash area with soap and water. Get medical attention if irritation develops or persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms persist.
Ingestion	Seek medical advice.
Most important symptoms/effects, acute and delayed	Irritation of eyes. Causes damage to organs (central nervous system, eyes).
Indication of immediate medical attention and special treatment needed	Treat symptomatically. Symptoms may be delayed. Methanol: Human exposure to methanol may result in illness, systemic poisoning, blindness, optic nerve damage and perhaps death, after being ingested, absorbed through the skin or inhaled. Death due to cardiac or respiratory failure has been reported in some cases from consumption of as little as 30 mls.

5. Fire-fighting measures

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Flammable liquid and vapor. By heating and fire, harmful vapors/gases may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Water spray should be used to cool containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Wear protective clothing as described in Section 8 of this safety data sheet. Ensure adequate ventilation. Ventilate closed spaces before entering them. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike the spilled material, where this is possible. Do not allow material to contaminate ground water system. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Large Spills: Dike far ahead of spill for later disposal. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste for proper disposal. Never return spills to original containers for re-use. Following product recovery, flush area with water. This material and its container must be disposed of as hazardous waste. Clean up in accordance with all applicable regulations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. Handling and storage

Precautions for safe handling	Eliminate all sources of ignition. The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. Ground container and transfer equipment to eliminate static electric sparks. All handling to take place in well-ventilated area. Local exhaust is recommended. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. Keep locked up. Store in a well-ventilated place. Store in a closed container away from incompatible materials. Do not store near heat sources or expose to high temperatures.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3 1000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m ³ 1000 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
Propylene glycol (CAS 57-55-6)	TWA	10 mg/m ³	Aerosol.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	No exposure limits noted for ingredient(s).
Appropriate engineering controls	Provide adequate ventilation and minimize the risk of inhalation of vapors and mists. Use explosion-proof equipment. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide easy access to water supply or an emergency shower.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear approved chemical safety glasses or goggles where eye exposure is reasonably probable.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear suitable protective clothing.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Thermal hazards	Not available.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Red liquid.
Physical state	Liquid.
Form	Liquid.
Color	Red.
Odor	Alcohol.
Odor threshold	Not available.
pH	7.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	98°F (36.6°C) Tag Closed Cup
Evaporation rate	1 (Butyl acetate = 1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.92 (20°C)
Solubility(ies)	
Solubility (water)	Completely soluble in water.
Partition coefficient (n-octanol/water)	Not available.

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, sparks, flames, elevated temperatures. Ignition sources. Contact with incompatible materials.
Incompatible materials	Acids. Metals. Oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	No harmful effects expected in amounts likely to be ingested by accident.
Inhalation	In high concentrations, vapors may irritate throat and respiratory system and cause coughing.
Skin contact	Direct contact may irritate.
Eye contact	Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Irritating to eyes. Causes damage to organs (central nervous system, eyes).

Information on toxicological effects

Acute toxicity May cause mild central nervous system effects. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness.

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
Acute		
<i>Inhalation</i>		
LC50	Rat	20000 mg/l, 10 Hours
<i>Oral</i>		
LD50	Rat	7060 mg/kg
Propylene glycol (CAS 57-55-6)		
Acute		
<i>Oral</i>		
LD50	Rat	30 g/kg
Skin corrosion/irritation	Direct contact may irritate.	
Serious eye damage/eye irritation	Causes eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not classified.	
Skin sensitization	Not classified.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	This product is not considered to be a carcinogen by NTP, IARC, or OSHA.	
Reproductive toxicity	Not classified.	
Specific target organ toxicity - single exposure	Causes damage to organs (central nervous system, eyes).	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not classified.	

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
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Ethanol (CAS 64-17-5)

Aquatic

Fish LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Persistence and degradability Not established.

Bioaccumulative potential Not established.

Partition coefficient n-octanol / water (log Kow)

Ethanol (CAS 64-17-5) -0.31

Propylene glycol (CAS 57-55-6) -0.92

Mobility in soil Not established.

Other adverse effects Not established.

13. Disposal considerations

Disposal instructions Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Hazardous waste code D001: Waste Flammable material with a flash point <140 °F

Waste from residues / unused products Dispose in accordance with all local, state and federal regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN1993
UN proper shipping name Flammable liquid, n.o.s. (Ethanol)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Special precautions for user Not available.
Special provisions B1, B52, IB3, T4, TP1, TP29
Packaging exceptions 150
Packaging non bulk 203
Packaging bulk 242

IATA

UN number UN1993
UN proper shipping name Flammable liquid, n.o.s. (Ethanol)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Environmental hazards No.
ERG Code 3L
Special precautions for user Not available.

IMDG

UN number UN1993
UN proper shipping name Flammable liquid, n.o.s. (Ethanol)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant No.
EmS F-E, S-E
Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

General information This product meets the limited quantities exception as follows:
 DOT: Limited quantities up to 5 liters.
 IATA: Limited quantities up to 5 liters.
 IMDG: Limited quantities up to 5 liters.
 Otherwise, the above descriptions apply.

15. Regulatory information

US federal regulations This product is hazardous according to OSHA 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethanol (CAS 64-17-5) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Ethanol (CAS 64-17-5)

US. New Jersey Worker and Community Right-to-Know Act

Ethanol (CAS 64-17-5)
Propylene glycol (CAS 57-55-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Ethanol (CAS 64-17-5)
Propylene glycol (CAS 57-55-6)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Ethanol (CAS 64-17-5)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

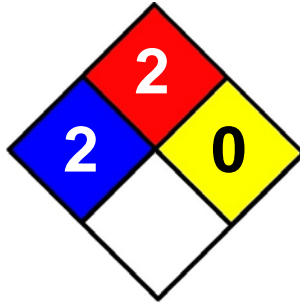
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	06-June-2019
Revision date	-
Version #	01
Further information	HMIS® is a registered trade and service mark of the NPCA.
NFPA Ratings	



References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
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