

**QUICK IDENTIFIER**(as used in label and list)1000 Green Low Freeze Point
Fluid

MATERIAL SAFETY DATA SHEET

SECTION I PRODUCT AND COMPANY IDENTIFICATION

COMMON NAME

1000 Green Low Freeze Point

PRODUCT FILE NUMBER

920:405-922WA-LFP-10

MANUFACTURER'S NAME

Meriam Instrument

ADDRESS

10920 Madison Ave.

PRODUCT MODEL NUMBER

922WA-LFP

PRODUCT USE

Indicating Fluid

EMERGENCY PHONE NUMBERS

1-800-255-3924 (US), + 01 813 248 0585 (International)

ENGINEERING CONTROL DATA

MSDS - A35796-1, Rev. M, EO 7393

CITY, STATE, ZIP

Cleveland, Ohio 44102

DATE PREPARED

05-Nov-2014

SECTION II HAZARDS IDENTIFICATION

ACUTE**EYES**

Based on presence of component 2, product is moderately to severely irritating to the eyes. Vapors can cause severe eye irritation.

INHALATION

Vapors or mists pose limited inhalation hazards. Symptoms such as eye and throat irritation may be experienced. Likewise, slight dizziness may result from this exposure. High level prolonged exposure may potentially lead to more serious effects.

SKIN CONTACT

Based on the presence of component 1, brief contact with undiluted material may cause slight reddening. More prolonged contact, as with, chemical saturated clothing, may cause moderate reddening, swelling, and possible damage to the skin. Frequent contact may result in the absorption of potentially harmful amounts. Signs and symptoms of toxicity are similar to those of ingestion.

INGESTION

Based on component 2, if swallowed has the potential of causing severe illness or death. Intoxication appears in stages. The first is a feeling of drunkenness without smell of alcohol on the breath. Nausea, vomiting, and eye symptoms may occur. Subsequently, rapid breathing, increased heart rate and decreased urination frequency may be experienced.

SIGNS AND SYMPTOMS OF EXPOSURE

Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness and nausea. In extreme cases, unconsciousness and death may occur. Kidney damage may be evidenced by changes in urine output, urine appearance or edema (swelling from fluid retention). Liver damage may be evidenced by loss of appetite, jaundice (yellowish skin color) and sometimes pain in the upper abdomen on the right side.

CHRONIC

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Preexisting skin, eye, and respiratory disorders may be aggravated by exposure to this product. Impaired kidney and liver functions from preexisting disorders may be aggravated by exposure to this product.

SECTION III COMPOSITION/INFORMATION ON INGREDIENTS

1. Chemical Name: Butyl Cellosolve
CAS No: 111-76-2
OSHA/PEL: 50 ppm
ACGIH/TLV: 20 ppm
% : 33

2. Chemical Name: Ethylene Glycol *
CAS No: 107-21-1
OSHA/PEL: NE*
ACGIH/TLV: 100 mg/m³ (C)
% : 19

3. Chemical Name: Aerosol OT Solution
CAS No: 577-11-7
OSHA/PEL: NE*
ACGIH/TVL: NE*
% : 4

4. Chemical Name: Green Dye
CAS No: 518-47-8
OSHA/PEL: NE*
ACGIH/TLV: NE*
% : Trace

5. Chemical Name: Green Dye
CAS No: 19381-50-1
OSHA/PEL: NE*
ACGIH/TLV: NE*
% : Trace

This product also contains 44% distilled water (CAS 7732-18-5) and a trace of Sodium Bicarbonate (CAS 144-55-8).

* This component is listed as a SARA title III section 313 toxic chemical and is identified as a hemolytic agent.

* Not Established

SECTION IV FIRST AID MEASURES

EYES

Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN CONTACT

Remove contaminated clothing and wash off skin with soap and water. Wash contaminated clothes. If irritation develops, contact a physician.

INHALATION

Due to high boiling point, inhalation is not normally a problem. Remove to fresh air.

INGESTION

If conscious, give two glasses of water and induce vomiting by giving 30cc (2 tablespoons) Syrup of Ipecac. If Ipecac is unavailable induce vomiting by touching finger to back of victim's throat. Keep victim's head below hips while vomiting. Take immediately to the hospital.

SECTION V FIRE FIGHTING MEASURES

FLASH POINT METHOD USED

Non Flashing NA

AUTO-IGNITION TEMPERATURE

NA

SPECIAL FIRE FIGHTING PROCEDURES

None

FLAMMABLE LIMITS (in Air % by Vol.)

NA NA

LEL UEL

EXTINGUISHER MEDIA

CO₂ , Dry Chemical

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

SECTION VI ACCIDENTAL RELEASE MEASURES

RESPONSE TO SMALL SPILLS

Absorb with non-combustible absorbent material. Dispose of properly, prevent from entering sewers. The product is a non-hazardous waste when spilled material is disposed of defined in Resource Conservation Recovery Act (RCRA) regulations (40CFR261).

WASTE DISPOSAL

Place in an appropriate disposal facility in compliance with Federal, State, and Local regulations.

SECTION VII HANDLING AND STORAGE

HANDLING AND STORAGE: Skin and eye contact should be avoided as good industrial practice.

Wearing of protective gloves and eye protection is recommended. Wash hands and contaminated skin area after handling. Follow all warnings and precautions even after container is emptied. Wash thoroughly after handling or at the end of the shift.

OTHER PRECAUTIONS: Store in cool dry place away from strong oxidizers and acids. Keep container tightly closed when not in use. All handling equipment should be properly grounded to prevent the build-up of electrostatic charges. Storage area should be equipped with a CO₂ system. Handle in accordance with good industrial hygiene and safety practices.

SECTION 7 NOTES: Containers should not be opened until ready for use.

SECTION VIII EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION

Not typically required. If exposure exceeds permissible exposure limits wear a self-contained breathing apparatus in compliance with NIOSH/MSHA specifications. Comply with 29CFR 1910.134.

VENTILATION

General (mechanical) room ventilation is generally satisfactory. Special, local ventilation may be needed at points where vapors can be expected to exceed exposure limits.

PROTECTIVE GLOVES

For the best protection wear butyl gloves. Wear additional protective garments where necessary.

EYE PROTECTION

Wear chemical goggles if there is likelihood of contact with eyes.

ADDITIONAL PROTECTIVE CLOTHING OR EQUIPMENT

Boots, aprons, or chemical suits should be used when necessary to prevent skin contact. Eye wash fountains and safety showers should be available for emergency use.

SECTION IX PHYSICAL & CHEMICAL PROPERTIES

BOILING POINT

310° F

VAPOR DENSITY (AIR=1)

<1

EVAPORATION RATE (BuAc=1)

NE

APPEARANCE & ODOR

Green, Odorless

SPECIFIC GRAVITY (H₂O=1)

0.9982 @ 20°C

SOLUBILITY IN WATER

Completely miscible

MELTING POINT

NE

V.O.C.

739g/L

VAPOR PRESSURE (20°C)

20

REACTIVITY IN WATER

0

pH

NA

SECTION X STABILITY AND REACTIVITY

STABILITY

Stable

CONDITION TO AVOID

NA

INCOMPATIBILITY (Materials to Avoid)

Oxidizing agents and alkali's

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide and undefined organic compounds may be formed during combustion.

HAZARDOUS POLYMERIZATION

Will not occur

CONDITIONS TO AVOID

NA

SECTION XI TOXICOLOGICAL INFORMATION

Acute Effects: **Inhalation:** High vapor concentrations may cause irritation of the upper respiratory tract and dyspnea.
Skin Contact: May cause irritation.

Chronic Effects: **Inhalation:** Repeated or prolonged exposures would be expected to cause irritation of the respiratory tract and narcosis. May cause liver and kidney damage as well as hemolysis.
Skin Contact: Produces skin irritation upon prolonged or repeated exposures.

Chemical Listed as Carcinogen or Potential Carcinogen

National Toxicology Program

NO

I.A.R.C Monographs

NO

OSHA

NO

SECTION XII ECOLOGICAL INFORMATION

Ecotoxicity: Liquid can be toxic to aquatic life.

Persistence/Degradability: Not Provided

Bioaccumulation/Accumulation: Not Provided

Mobility in Environment: Not Provided

SECTION XIII DISPOSAL CONSIDERATIONS

Disposal: Dispose of all cleanup materials in accordance with all Local, State, and Federal regulations.

SECTION XIV TRANSPORT INFORMATION

Proper Shipping Name: N/A
Hazard Class or Division: N/A
Identification Number: N/A
Packing Group: N/A
Packing Authorization: N/A
IATA Packing Instructions: N/A

SECTION XV REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCE CONTROL ACT): All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements.

SARA Section 302 Extremely Hazardous Substances (EHS): This product does not contain any components regulated under Section 302 (40 CFR 355) as Extremely Hazardous Substances.

SARA Section 304 CERCLA Hazardous Substances: This product does not contain any components regulated under section 304 (40 CFR 370) as hazardous chemicals for emergency release.

SARA Section 311/312 Hazard Communication Standard (HCS): This product is regulated under Section 311/312 HCS (40 CFR 370) as:

Delayed Health Hazard
Fire Hazard
Immediate Health Hazard

SARA Section 313 Toxic Chemical List (TCL): This product contains Glycol Ether.

Clean Water Act CWA – Priority Pollutants: Not Provided

STATE REGULATIONS: California Proposition 65: Not Provided

INTERNATIONAL REGULATIONS: Not Provided

SECTION XVI OTHER INFORMATION

- THIS PRODUCT IS FOR INDUSTRIAL AND LABORATORY USE ONLY.
- Do not store in open, unlabeled or mislabeled containers.
- Store in cool, dry place with adequate ventilation.
- Keep away from flames and high temperatures.
- For personal hygiene protection, we recommend that employees wash thoroughly after handling product.

Always wash up before eating, smoking, and using toilet facilities.

-Keep out of reach of children.

-HMIS rating HEALTH - 2 FLAMMABILITY - 0 REACTIVITY - 1

DISCLAIMER OF LIABILITY

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of the results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. User of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION CONTAINED HEREIN OR THE CHEMICAL TO WHICH THE INFORMATION REFERS. It is the responsibility of the user to comply with all applicable federal, state, local laws and regulations.
