

MATERIAL SAFETY DATA SHEET

SECTION I PRODUCT AND COMPANY IDENTIFICATION

COMMON NAME

1000 Green Concentrate

PRODUCT FILE NUMBER

920:405-922WA-10

MANUFACTURER'S NAME

Meriam Instrument

ADDRESS

10920 Madison Ave.

CITY, STATE, ZIP

Cleveland, Ohio 44102

PRODUCT MODEL NUMBER

922WA

PRODUCT USE

Indicating Fluid

EMERGENCY PHONE NUMBERS

1-800-424-9300 (US), 1-703-527-3887 (International)

ENGINEERING CONTROL DATA

MSDS - A35794-1, Rev. L, EO 6445

Drawing – A35314

DATE PREPARED

7-07-08

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 it 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** 2. Chemical Name: Ethylene Glycol *

111-76-2 CAS No: 107-21-1 CAS No: OSHA/PEL: 50 ppm OSHA/PEL: NE* 100 mg/m³(C) ACGIH/TLV: 20 ppm ACGIH/TLV: %:

63.7 **%:** 10.3

3. Chemical Name: Aerosol OT Solution 4.Chemical Name: Green Dye

CAS No: 577-11-7 CAS No: 518-47-8 OSHA/PEL: NE* OSHA/PEL: NE* ACGIH/TLV: NE* ACGIH/TLV: NE* %:

0.3 %: Trace

5. Chemical Name: Green Dye This product also contains 25.7% distilled water

19381-50-1 (CAS 7732-18-5) and a trace of Sodium CAS No:

Bicarbonate (CAS 144-55-8). OSHA/PEL: NE* NE* ACGIH/TLV:

%: Trace

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.

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.

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 FLAMMABLE LIMITS (in Air % by Vol.) LEL UEL NA Non Flashing NA

AUTO-IGNITION TEMPERATURE EXTINGUISHER MEDIA CO₂, Dry Chemical NA

SPECIAL FIRE FIGHTING PROCEDURES **UNUSUAL FIRE AND EXPLOSION HAZARDS**

None None

QUICK IDENTIFIER – 1000 Green Concentrate

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

^{*} Not Established

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 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 were 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 SPECIFIC GRAVITY (H₂O=1) VAPOR PRESSURE (20°C)

20

310° F 0.9982 @ 20°C -

<u>VAPOR DENSITY (AIR=1)</u> <u>SOLUBILITY IN WATER</u> <u>REACTIVITY IN WATER</u>

<1 Completely miscible 0

EVAPORATION RATE (BuAc=1) MELTING POINT PH

Green, Odorless 739g/L

SECTION X STABILITY AND REACTIVITY

STABILITY
Stable

CONDITION TO AVOID
Avoid exposure to heat

INCOMPATIBILITY (Materials to Avoid)

Oxygen and strong oxidizing agents

<u>HAZARDOUS DECOMPOSITION PRODUCTS</u>
Carbon oxides and various hydrocarbons may be formed during combustion.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

Will not occur 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

NO I.A.R.C Monographs OSHA NO NO

SECTION XII ECOLOGICAL INFORMATION

Eastevieity Liquid can be toxic to equation life

Ecotoxicity: Liquid can be toxic to aquatic life.

Persistence/Degradability: Not Provided

Bioaccumulation/Accumulation: Not Provided

Mobility in Environment: Not Provided

QUICK IDENTIFIER – 1000 Green Concentrate Page 4 of 6

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: Not Regulated

Hazard Class or Division: 3
Identification Number: NA1993
Packing Group: III

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 2 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.