



(as used in label and list)
1000 Green Concentrate

# **Safety Data Sheet**

### Section 1 Product and Company Identification

Common Name Product Model Number

1000 Green Concentrate 922WA

**Product File Number**920:405-922WA-10

Product Use
Indicating Fluid

Manufacturer's Name Emergency Phone Numbers

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

Address Engineering Control Data

10920 Madison Ave. MSDS - A35794-1, Rev. 0, E0 7519

Drawing - A35314

City, State, Zip Date Prepared
Cleveland, Ohio 44102 06-Nov-2015

## **Section 2** Hazards Identification

#### Classification of the substance or mixture

#### **GHS Hazards**

Flammable liquids:

Acute toxicity (Oral):	Category 4
Acute toxicity (Inhalation):	Category 4
Acute toxicity (Dermal):	Category 4
Eye irritation:	Category 2A
Skin irritation:	Category 2

Pictogram: Hazard symbols:



Category 4

Signal word: WARNING.

Hazard statements	
H227	Combustible liquid.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H371	May cause damage to organs, single exposure.
Н373	May cause damage to organs or organ systems through prolonged or repeated exposure, kidney.

Precautionary stateme	ents
Prevention	
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray
P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response	
P370 + P378	In case of fire:
	<ul> <li>Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction.</li> </ul>
P301 + P312	If swallowed:
	Call a <b>Poison Center</b> or doctor/ physician if you feel unwell.
P314	Get medical advice if you feel unwell.
P330	Rinse mouth.
P302 + P352	If on skin:
	Wash with plenty of soap and water.
P362	Take off contaminated clothing and wash before reuse.
P333 + P313	If skin irritation or rash occurs:
	Get medical advice or attention.
P305 + P351 + P338	If in eyes:
	<ul> <li>Rinse cautiously with water for several minutes.</li> </ul>
	Remove contact lenses, if present and easy to do.
	Continue rinsing.
P337 + P313	If eye irritation persists:
	Get medical advice/ attention.
P304 + P340	If inhaled:
	<ul> <li>Remove victim to fresh air and keep at rest in a position comfortable for breathing.</li> </ul>

Storage:	
P403 + P235	<ul><li>Store in a well-ventilated place.</li><li>Keep cool.</li></ul>
Disposal:	
P501	Dispose of contents/container to an approved waste disposal plant.

#### **Section 3 Composition/Information on Ingredients** 1. Chemical name: **Butyl Glycol Ether** CAS No: 111-76-2 EC-No: 203-905-0 %: 63.7 2. Chemical name: **Distilled Water** CAS No: 7732-18-5 231-791-2 EC-No: %: 25.7 3. Chemical name: Ethylene Glycol\* CAS No: 107-21-1 EC-No: 203-473-3 %: 10.3 4. Chemical name: **Aerosol OT Solution** CAS No: 577-11-7 EC-No: 209-406-4 %: 0.3 5. Chemical name: Green Dye CAS No: 19381-50-1 EC-No: 243-010-2 %: < 0.1 6. Chemical name: Green dye CAS No: 518-47-8 EC-No: 231-791-2 < 0.1 %:

7. Chemical name:

CAS No:

EC-No:

%:

Sodium Bicarbonate

144-55-8

205-633-8

< 0.1

\* This component is listed as a SARA Title III Section 313 toxic chemical and is identified as a hemolytic agent.

Section 4	First Aid Measures
Eye contact:	<ul> <li>Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open.</li> <li>Get medical attention.</li> </ul>
Skin contact:	<ul> <li>Remove contaminated clothing and wash off skin with soap and water.</li> <li>Wash contaminated clothes.</li> <li>If irritation develops, contact a physician.</li> </ul>
Inhalation:	<ul> <li>Remove to fresh air.</li> <li>If breathing is irregular or stopped, administer artificial respiration.</li> <li>Call a physician immediately.</li> </ul>
Ingestion:	<ul><li>Do not induce vomiting.</li><li>Seek immediate medical attention.</li></ul>
Section 5	Fire Fighting Measures
Extinguishable media:	Water spray, Foam, Dry chemical, Carbon dioxide (CO2).
Flamable properties Fire/explosion	NFPA Class IIIA combustible liquid.
Advice for fire-fighters:	In the event of fire, wear self-contained breathing apparatus.
Further information Combustion products:	<ul> <li>Keep containers and surroundings cool with water spray.</li> <li>Carbon oxides, hydrogen chloride gas.</li> </ul>
Section 6	Accidental Release Measures
Personal precautions, protective equipment, and emergency procedures:	<ul> <li>Evacuate non-essential personnel.</li> <li>Wear all appropriate protective equipment designated in <b>Section 8</b>.</li> <li><b>Do not</b> breathe vapors or aerosols.</li> <li>Ventilate the area.</li> <li>Do not get material on skin or clothing.</li> </ul>
Environmental precautions:	<ul> <li>Avoid dispersal of spilled material or runoff and prevent contact wit soil and entry into drains, sewers, or waterways.</li> </ul>
Methods and materials for containment and clean up:	<ul> <li>Cover drains and contain spill.</li> <li>Cover spill with a large quantity of inert absorbent (for example: sand, earth, diatomaceous earth, vermiculite).</li> <li>Do not use combustible material such as sawdust.</li> <li>Shovel or sweep up material and place into an approved container for proper disposal.</li> <li>Do not allow material or runoff from rinsing contaminated areas to enter floor drains or storm drains and ditches that lead to waterway</li> <li>Dispose of according to state and federal regulations.</li> </ul>

 Place in an appropriate disposal facility in compliance with federal, state, and local regulations, (see Section 13).

### **Section 7**

## **Handling and Storage**

#### **Precautions for safe handling:**

- 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.
- Use only with adequate ventilation.
- Follow all warnings and precautions even after container is emptied.
- · Wash thoroughly after handling or at the end of the shift.
- Handle in accordance with good industrial hygiene and safety practices.

#### **Conditions for safe storage:**

- Store in tightly closed containers in a cool dry, well ventilated area.
- Keep away from, heat, sources of ignition and incompatibles; strong oxidizers and acids.
- Keep container tightly closed and upright when not in use, should not be opened until ready for use.

#### Other precautions:

- All handling equipment should be properly grounded to prevent the build-up of electrostatic charges.
- Storage area should be equipped with CO2 system.

### **Section 8**

## **Exposure Controls/Personal Protection**

Control parameters	
CAS Number:	111-76-2
Ingredient:	2-butoxyethanol
OSHA/PEL:	50 ppm 240 mg/m <sup>3</sup>
ACGIH TLV:	(8-hour) 20 ppm
CAS Number:	107-21-1
Ingredient:	Ethylene Glycol
OSHA/PEL: CEIL:	100 mg/m <sup>3</sup>
ACGIH TLV: STEL:	50 ppm

#### **Exposure Controls**

#### **Engineering Measures:**

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

#### **Individual protection measures:**

- Wear protective clothing to prevent repeated or prolonged contact with product.
- Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substance handled.
- The chemical resistance of the protective equipment should be inquired at the representative supplier.

Hygiene measures:	<ul> <li>Facilities storing or using this material should be equipped with an eyewash station and safety shower.</li> <li>Change contaminated clothing.</li> <li>Preventative skin protection is recommended.</li> <li>Wash hands thoroughly after use, before eating, drinking or using lavatory.</li> </ul>
Eye/face protection:	<ul> <li>Wear protective goggles or safety glasses with non-perforated side shields and face shield.</li> <li>Refer to 29 CFR 1910.133, ANSI Z87.4 or Standard EN 166.</li> </ul>
Hand protection:	<ul> <li>Wear gloves recommended by glove supplier for protection against materials in <b>Section 3</b>.</li> <li>Glove should be impermeable to chemicals and oil.</li> <li>Breakthrough time should be greater than the intended use period.</li> </ul>
Respiratory protection:	<ul> <li>Not typically required.</li> <li>If exposure exceeds permissible exposure limits, wear a self-contained breathing apparatus.</li> <li>Always use approved respirator when vapor/aerosols are generated.</li> <li>Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.</li> <li>If the respirator is the sole means of protection, use a full-face supplied air respirator.</li> <li>Use respirators and components tested and approved under the appropriate government standards such as NIOSH (US) or CEN (EU).</li> </ul>
Additional protective clothing or equipment:	<ul> <li>Boots, aprons, or chemical suits should be used when necessary to prevent skin contact.</li> <li>Eye wash fountains and safety showers should be available for emergency use.</li> </ul>

# **Section 9** Physical and Chemical Properties

Appearance:	Green color.
Form:	Liquid
Odor:	Mild.
Odor threshold:	No data available.
pH:	Data unavailable.
Freezing/melting point, range:	Not established.
Initial Boiling point:	154 °C (310 °F)
Evaporation rate:	Data unavailable.
Flammability (solid, gas):	No data available.
Flammability:	Data unavailable.
Flash point:	Not established.
Autoignition temperature:	Data unavailable.
Decomposition temperature:	No data available.
Lower explosive limit (LEL):	Data unavailable.
Upper explosive limit:	Data unavailable.
Vapor pressure:	20 at (20 °C)

Vapor density:	< 1, (air=1)
Specific gravity:	0.9982 at 20 °C, (H <sub>2</sub> 0)
Viscosity:	Data unavailable.
Solubility in water:	Completely miscible.
Reactivity in water:	0
Partition coefficient: n-Octanol/water:	Data unavailable.
Volatiles by volume at 21 °C:	Data unavailable.
V.O.C.:	739 g/L
Other data:	No data available.

Reactivity:	Stable at normal ambient temperature and ordinary conditions.
Chemical stability:	No decomposition if stored and applied as directed.
Conditions to avoid:	Keep away from heat, flames, and sources of ignition.
Incompatibility (Materials to Avoid):	Oxygen and strong oxidizing agents.
Hazardous decomposition products:	Carbon oxides and various hydrocarbons may be formed during combustion.

**Stability and Reactivity** 

# Section 11 Toxicological Information

Will not occur.

Acute toxicity	
LD50, Oral-Rat:	<ul> <li>&gt; 300 mg/kg to 2 000 mg/kg (literature value)</li> </ul>
LD50, Derma-Rabbit:	<ul> <li>&gt; 1 000 mg/kg to 2 000 mg/kg (literature value)</li> </ul>
LC50, Inhalation-Rat	• (4 hours): > 10 mg/L to 20 mg/L
Inhalation	
Acute Effects:	High vapor concentrations may cause irritation of the upper respiratory tract and dyspnea.
Chronic Effects:	<ul> <li>Repeated or prolonged exposures would be expected to cause irritation of the respiratory tract and narcosis.</li> <li>May cause liver and kidney damage as well as hemolysis.</li> </ul>
Skin corrosion/irritation	
Skin contact:	May cause skin irritation.
Prolonged or repeated exposures:	Produces skin irritation.
Eye irritation/corrosion:	Causes eye irritation.
Sensitization:	No data available.
Genotoxicity in vitro:	Not established.

**Section 10** 

**Hazardous polymerization:** 

Mutagenicity	Not indicated.
Reproductive toxicity:	No data available.
Specific target organ toxicity (single exposure):	No data available.
Specific target organ toxicity (repeated exposure):	No data available.
Aspiration hazard:	No data available.

Carcinogen or potential carcinogen			
National Toxicology Program:	No.		
I.A.R.C Monographs:	No.		
OSHA:	No.		
Reproductive effects:	<ul> <li>Does not impair fertility.</li> <li>Not a developmental toxicant.</li> <li>Causes foetoxicity in animals; considered to be secondary to maternal toxicity.</li> </ul>		

# Section 12 Ecological Information

Toxicity:	Liquid can be toxic to aquatic life.	
Persistent and degrade in the environment:	Not provided.	
Bioaccumulative potential:	Not provided.	
Mobility in soil:	Not provided.	
Results of PBT and vPvB assessment:	Not provided.	
Other adverse effects:	<ul> <li>Additional ecological information:</li> <li>Do not allow material to run into surface waters, wastewaters, or soil.</li> <li>An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.</li> </ul>	

# Section 13 Disposal Considerations

# Waste treatment methods/disposal methods:

- The generation of waste should be avoided or minimized whenever possible.
- Empty containers or liners may retain some product residues.
- This material and its container must be disposed of in a safe way.
- Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.
- Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
- Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Contact a licensed professional waste disposal service to dispose of this material along with any containment and cleanup materials.

łazard waste:	•	Not considered a hazardous substance.
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• Dispose of all cleanup materials in accordance with all local, state, and federal regulations.

# Section 14 Transport Information

Proper Shipping Name: Not regulated.

Hazard Class or Division: 3

Identification Number: NA1993

Packing Group: III

IATA/ICAO: Not regulated.

## Section 15 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)	<ul> <li>This product is regulated under Section 311/312 HCS (40 CFR 370) as:</li> <li>Delayed health hazard.</li> <li>Fire Hazard.</li> <li>Immediate Health Hazard.</li> </ul>	
SARA 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 16** 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.