



## Safety Data Sheet

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This Safety Data Sheet (SDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a SDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

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### SECTION 1: Identification

#### 1.1. Product identifier

3M 1400 Series EMS Ball Markers

#### Product Identification Numbers

80-6111-4219-3, 80-6111-4220-1, 80-6111-4221-9, 80-6111-4222-7, 80-6111-4322-5, 80-6111-4323-3, 80-6111-4324-1, 80-6111-6113-6, 80-6111-6114-4, 80-6111-6115-1, 80-6111-6117-7, 80-6111-6835-4, 80-6113-8267-4, 80-6113-8268-2, 80-6300-0025-7, 80-6300-0032-3, 80-6300-0033-1

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Ball Markers are used to indicate location of buried cables, pipes and equipment., Flotation solution allows antenna to keep correct orientation in ball. Propylene glycol lowers freezing point.

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Electrical Markets Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

This product is exempt from hazard classification according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 2.2. Label elements

##### Signal word

Not applicable.

**Symbols**

Not applicable.

**Pictograms**

Not applicable.

**2.3. Hazards not otherwise classified**

None.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	50 - 60
Propylene Glycol	57-55-6	10 - 20
Electronics	Mixture	10 - 20
Polyethylene	9002-88-4	10 - 20

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Inhalation:**

No need for first aid is anticipated.

**Skin Contact:**

No need for first aid is anticipated.

**Eye Contact:**

No need for first aid is anticipated.

**If Swallowed:**

No need for first aid is anticipated.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable.

**SECTION 5: Fire-fighting measures**

**5.1. Suitable extinguishing media**

In case of fire: Use a carbon dioxide or dry chemical extinguisher to extinguish.

**5.2. Special hazards arising from the substance or mixture**

None inherent in this product.

**Hazardous Decomposition or By-Products**

**Substance**

Aldehydes  
Carbon monoxide  
Carbon dioxide

**Condition**

During Combustion  
During Combustion  
During Combustion

**5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Not applicable.

**6.2. Environmental precautions**

Not applicable.

**6.3. Methods and material for containment and cleaning up**

Not applicable.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

**7.2. Conditions for safe storage including any incompatibilities**

Not applicable.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Propylene Glycol	57-55-6	AIHA	TWA(as aerosol):10 mg/m <sup>3</sup>	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**8.2. Exposure controls****8.2.1. Engineering controls**

Not applicable.

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**

Eye protection not required.

**Skin/hand protection**

No chemical protective gloves are required.

**Respiratory protection**

Respiratory protection is not required.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Solid Plastic ball with solution inside.
<b>Specific Physical Form:</b>	Plastic ball with liquid inside.
<b>Odor, Color, Grade:</b>	Various colored plastic balls, no odor.
<b>Odor threshold</b>	<i>Not Applicable</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>No Data Available</i>
<b>Boiling Point</b>	<i>Not Applicable</i>
<b>Flash Point</b>	No flash point
<b>Evaporation rate</b>	Nil
<b>Flammability (solid, gas)</b>	Not Classified
<b>Flammable Limits(LEL)</b>	None detected
<b>Flammable Limits(UEL)</b>	None detected
<b>Vapor Pressure</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	<i>No Data Available</i>
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	<i>No Data Available</i>
<b>Specific Gravity</b>	Approximately 1 g/ml [ <i>Ref Std: WATER=1</i> ]
<b>Solubility in Water</b>	Nil
<b>Solubility- non-water</b>	<i>Not Applicable</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>Not Applicable</i>
<b>Decomposition temperature</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>
<b>Average particle size</b>	<i>Not Applicable</i>
<b>Bulk density</b>	<i>Not Applicable</i>
<b>Hazardous Air Pollutants</b>	<i>No Data Available</i>
<b>Molecular weight</b>	<i>No Data Available</i>
<b>Volatile Organic Compounds</b>	<i>Not Applicable</i>
<b>Percent volatile</b>	<i>Not Applicable</i>
<b>Softening point</b>	<i>No Data Available</i>
<b>VOC Less H2O &amp; Exempt Solvents</b>	<i>No Data Available</i>
<b>Ash</b>	<i>Not Applicable</i>

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products****Substance****Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

**SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

**11.1. Information on Toxicological effects****Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

**Inhalation:**

No health effects are expected.

**Skin Contact:**

No health effects are expected.

**Eye Contact:**

No health effects are expected.

**Ingestion:**

No health effects are expected.

**Additional Information:**

This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Propylene Glycol	Dermal	Rabbit	LD50 20,800 mg/kg
Propylene Glycol	Ingestion	Rat	LD50 22,000 mg/kg
Polyethylene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polyethylene	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Propylene Glycol	Rabbit	No significant irritation
Polyethylene		No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Propylene Glycol	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
Propylene Glycol	Human	Some positive data exist, but the data are not sufficient for classification

**Respiratory Sensitization**

Name	Species	Value
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**Germ Cell Mutagenicity**

Name	Route	Value
Propylene Glycol	In Vitro	Not mutagenic
Propylene Glycol	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Propylene Glycol	Dermal	Mouse	Not carcinogenic
Propylene Glycol	Ingestion	Multiple animal species	Not carcinogenic
Polyethylene	Not Specified	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Propylene Glycol	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 10,100 mg/kg/day	2 generation
Propylene Glycol	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 10,100 mg/kg/day	2 generation
Propylene Glycol	Ingestion	Not toxic to development	Multiple animal species	NOAEL 1,230 mg/kg/day	during organogenesis

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Propylene Glycol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Propylene Glycol	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 1,370 mg/kg/day	117 days

Propylene Glycol	Ingestion	kidney and/or bladder	All data are negative	Dog	NOAEL 5,000 mg/kg/day	104 weeks
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**Aspiration Hazard**

Name	Value
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Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information****Ecotoxicological information**

<u>Test Organism</u>	<u>Test Type</u>	<u>Result</u>
Green algae, Selenastrum capricornutum	48 hours Effect Concentration 50%	19000 mg/l
Fathead Minnow, Pimephales promelas	48 hours Lethal Concentration 50%	51400 mg/l
Rainbow Trout, Oncorhynchus mykiss	48 hours Lethal Concentration 50%	51600 mg/l
Water flea, Daphnia magna	48 hours Lethal Concentration 50%	43000 mg/l
Fathead Minnow, Pimephales promelas	96 hours Lethal Concentration 50%	7100 mg/l

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

<u>Test Type</u>	<u>Result</u>	<u>Protocol</u>
Theoretical Oxygen Demand	1.685	
20 days Percent degraded	72.7 % weight	

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations****13.1. Disposal methods**

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**SECTION 14: Transport Information**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information****15.1. US Federal Regulations**

Contact 3M for more information.

**311/312 Hazard Categories:**

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

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health: 0 Flammability: 1 Instability: 0 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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