



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 Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013 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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This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

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	FE-6000-0523-8		

1.2. Recommended use and restrictions on use

Recommended use

To identify and locate the buried networks of telecommunication of gas or electricity water, Flotation solution allows antenna to keep correct orientation in ball. Propylene glycol lowers freezing point.

1.3. Supplier's details

ADDRESS: 3M Malaysia Sdn. Bhd., Level 8, Block F, Oasis Square, No.2, Jalan PJU 1A/7A, Ara Damansara 47301 Petaling, Jaya, Selangor

Telephone: 03-7884 2888

E Mail: 3mmyehsr@mmm.com

Website: www.3M.com.my

1.4. Emergency telephone number

+60 03-7884 2888

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

This product is considered to be an article and is exempt from GHS classification.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

This material is a mixture.

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

<u>Substance</u>	<u>Condition</u>
Aldehydes	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	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

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

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

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

<u>Substance</u>	<u>Condition</u>
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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 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

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

Serious Eye Damage/Irritation

Name	Species	Value
Propylene Glycol	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Propylene Glycol	Human	Not classified

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

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 classified for female reproduction	Mouse	NOAEL 10,100 mg/kg/day	2 generation
Propylene Glycol	Ingestion	Not classified for male reproduction	Mouse	NOAEL 10,100 mg/kg/day	2 generation
Propylene Glycol	Ingestion	Not classified for 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	Not classified	Human and animal	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Propylene Glycol	Ingestion	hematopoietic system	Not classified	Multiple animal species	NOAEL 1,370 mg/kg/day	117 days
Propylene Glycol	Ingestion	kidney and/or bladder	Not classified	Dog	NOAEL 5,000 mg/kg/day	104 weeks

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

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

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labeling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Propylene Glycol	57-55-6	Crustacea other	Experimental	96 hours	Lethal Concentration 50%	18,800 mg/l
Propylene Glycol	57-55-6	Green Algae	Experimental	96 hours	Effect Concentration 50%	19,000 mg/l
Propylene Glycol	57-55-6	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	40,613 mg/l
Propylene Glycol	57-55-6	Water flea	Experimental	48 hours	Effect Concentration 50%	18,340 mg/l
Propylene Glycol	57-55-6	Green algae	Experimental	96 hours	No obs Effect Conc	15,000 mg/l
Propylene Glycol	57-55-6	Water flea	Experimental	7 days	No obs Effect Conc	13,020 mg/l
Polyethylene	9002-88-4		Data not available or insufficient for classification			

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12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Propylene Glycol	57-55-6	Experimental Biodegradation	28 days	Biological Oxygen Demand	90 % BOD/ThBOD	OECD 301C - MITI (I)
Polyethylene	9002-88-4	Data not available - insufficient			N/A	

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Propylene Glycol	57-55-6	Experimental Bioconcentration		Log of Octanol/H ₂ O part. coeff	-0.92	Other methods
Polyethylene	9002-88-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

According to the Environmental Quality (Scheduled Wastes) Regulations 2005, scheduled waste has to be sent to a prescribed premise for recycling, treatment or disposal. Please approach Kualiti Alam for proper schedule waste classification and disposal.

SECTION 14: Transport Information

Not hazardous for transportation.

Marine Transport (IMDG)

UN Number: None assigned.

Proper Shipping Name: None assigned.

Technical Name: None assigned.

Hazard Class/Division: None assigned.

Subsidiary Risk: None assigned.

Packing Group: None assigned.

Limited Quantity: None assigned.

Marine Pollutant: None assigned.

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

Air Transport (IATA)

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UN Number:None assigned.
Proper Shipping Name:None assigned.
Technical Name:None assigned.
Hazard Class/Division:None assigned.
Subsidiary Risk:None assigned.
Packing Group:None assigned.
Limited Quantity:None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information.

SECTION 16: Other information

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3M Malaysia SDSs are available at www.3M.com.my