

# Safety Data Sheet

Conforms to OSHA HazCom 2012 & CPR Standards  
Product Name: **ECO2 MMS (PART B)** Revision Date: 03-07-2018



## Section 1. Product and Company Identification

Product Name: ECO2 MMS (PART B)  
Recommended Use(s): Water mitigation system (Part B)  
Non-Recommended Use(s): Not specified  
Manufacturer: PROMA Adhesives, Inc. 9801 Boulevard parkway,  
Anjou, QC, H1J 1P3, Canada  
Email: info@eco2level.com  
Url: www.eco2level.com  
Emergency Contact: **Emergency Spills (CANUTEC):** (613) 996-6666 / Emergency contact number in Canada/USA

## Section 2. Hazard Identification

### GHS Classification for mixture:

Serious eye damage/eye irritation - Category 1  
Skin corrosion/irritation - Category 1B  
Skin sensitization - Category 1  
Acute Toxicity (oral) - Category 4  
Germ Cell Mutagenicity - Category 2  
Toxic to reproduction (fertility) - Category 2  
Specific Target Organ Toxicity (Repeated Exposure) - Category 2

### Pictograms:



**Signal Words:** Danger

### Hazard Statements:

Causes severe skin burns and eye damage.  
Harmful if swallowed.  
May cause an allergic skin reaction.  
Suspected of damaging fertility.  
Suspected of causing genetic defects.  
May cause damage to organs through prolonged or repeated exposure.

### Precautionary Statements: General

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe fumes. Wash hands thoroughly after handling. Wear protective gloves, eye protection and a dust mask.

**Response** If exposed or concerned: Get medical advice/attention. Get medical advice if you feel unwell. IF IN EYES: Remove contact lenses, if present and easy to do, rinse with water for several minutes. IF ON SKIN: Rinse with water for several minutes. IF INHALED, Move the person to fresh air. IF INGESTED, call a poison center.

**Storage** Store locked up.

**Disposal** Dispose of contents/container in accordance with local regulations.

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## Section 3. Composition / Information on Ingredients

Identifiers	Ingredients	Percentage
100-51-6	benzyl alcohol	< 50%
84852-15-3	4-nonylphenol	< 25%
112-57-2	Tetraethylenepentamine	< 25%
15520-10-2	2-methylpentane-1,5-diamine	< 5%
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	< 3%
112-24-3	Triethylenetetramine	< 0.5%

## Section 4. First-Aid Measures

### First Aid: Eyes

**IF IN EYES:** Wash eyes with plenty of water. Hold eyelids open to ensure adequate flushing. Remove contact lenses if present and easy to do so. Continue rinsing. Seek medical attention.

### First Aid: Skin

**IF ON SKIN:** Rinse with water for several minutes. Take off all contaminated clothing and wash it before reuse. In case of chemical burns, redness or other symptoms, seek medical advice/attention.

### First Aid: Ingestion

**IF INGESTED:** Call a poison center. Do not induce vomiting.

### First Aid: Inhalation

**IF INHALED:** Move the person to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if symptoms occur.

## Section 5. Firefighting Measures

### Flammability

Low flammability. This product must be heated at high temperature to present a risk.

### Suitable Extinguishing Media

Use dry chemical, water spray, carbon dioxide or alcohol-resistant foam.

### Unsuitable Extinguishing Media

Not available

### Specific Hazards Arising from Combustion of Products

**Combustion Products:** May include and are not limited to Oxides of carbon (COx) and halogenated compounds.

**Heat and Fire:** The product is slightly flammable. Fire and heat may decompose the product and generate hazardous gas, vapor or dust.

### Protective Measures for Firefighting

Wear protective clothing to prevent contact with skin and eyes completely. Wear self-contained breathing apparatus for firefighting. Avoid direct contact with the substance. Avoid breathing gas, vapor or dust. In the case of large fires, evacuate residents who are downwind of fire.

### Specific Hazards Arising from Combustion of Products

#### Explosion data:

Sensitivity to mechanical impact:	Not available
Sensitivity to Static discharge:	Not available

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## Section 6. Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves, clothing and protective goggles to prevent contact with skin and eyes.  
Avoid direct contact.  
Avoid generating dust.  
See protective measures in section 7 & 8.

### Environmental Precautions

Prevent entry into sewers, water courses, basements or confined areas. Dispose the material in accordance with the government regulation. If the product has entered a water course or sewer or contaminated soil or vegetation, advise the local emergency services and environmental authorities.

### Cleanup Procedures

Collect and transfer to a closable container without splash or generating dust / mist. Dispose the material in accordance with the government regulations.

## Section 7. Handling and Storage

### Precautions for Safe Handling

**Handling:** Avoid direct contact with the substance. Avoid breathing dust. Keep container tightly closed. Wear protective gloves, clothing and protective goggles to prevent contact with skin and eyes. Ensure there is sufficient ventilation of the area. Do not eat or drink during handling. Report immediately if physical damage, leakage or spillage occurs.

**General hygiene advice:** Launder contaminated clothing before reuse. Wash any exposed area of body thoroughly after handling before eating, drinking or smoking.

### Conditions for Safe Storage

Store locked up. Keep container tightly closed. Store in a well-ventilated area. Keep out of the reach of children. Respect the laws of the safety standards and occupational health.

## Section 8. Exposure Controls / Personal Protection

### Control Parameters / Exposure Guideline

Ingredients	Occupational Exposure Limits	
	AIHA WEEL	
Tetraethylenepentamine	TWA: 5 mg/m <sup>3</sup> (8h)	Absorbed through skin. Skin sensitizer.
Benzyl alcohol	TWA: 10 ppm (8h)	
Triethylenetetramine	TWA: 1 ppm (8h)	Absorbed through skin.

### Control Parameters / Exposure Controls

Engineering Controls: Use ventilation adequate to keep exposures below recommended exposure limits. (airborne levels of dust, fume, vapor etc.)

### Control Parameters / Individual Protective Measures

**Eye/Face Protection:** Wear Safety goggles. Don't use eye lens.  
**Skin and Body Protection:** Wear protective clothing. Wear a dust mask.  
**Hand Protection:** Wear impermeable gloves.  
**Respiratory Protection:** If ventilation is inadequate or in the case of mechanical work on cured material or when mixing use an adequate respiratory equipment.

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## Section 9. Physical and Chemical Properties

### Basic physical and chemical properties Information

Physical state:	Liquid
Color:	Yellow
Odor:	Amine
Odor threshold:	Not available
pH (in water):	Not available
Melting/freezing point:	Not available
Boiling point:	Not available
Flash point:	Not available
Evaporation rate:	Not available
Flammability:	Slightly flammable
Upper Explosive Limit:	Not available
Lower Explosive Limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Wet specific gravity (kg/L):	1
Solubility uncured:	Not soluble
Solubility cured:	Not available
Octanol/Water coefficient:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity (kcPs @ 21°C):	Not available
Oxidizing Properties:	Not available
Explosive Properties:	Not available
VOC content (g/l)	0

## Section 10. Chemical Stability and Reactivity Information

<b>Stability/Reactivity</b>	Stable under ambient condition.
<b>Possibility of Hazardous Reactions</b>	None
<b>Conditions to Avoid</b>	Incompatible materials.
<b>Materials to Avoid</b>	Oxidizer.
<b>Hazardous Products of Decomposition</b>	May include and are not limited to Oxides of carbon (COx) and halogenated compounds.

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## Section 11. Toxicological Information

### Toxicological Information for Product

**Prolonged /Repeated Exposure:** Prolonged / Repeated exposure may cause allergic skin reaction.

**Ingestion:** The product is not classified for ingestion hazard.

**Toxicological Data:** No toxicological data exists for the product.

**Carcinogenicity:** This product is not classified as carcinogenic.

**Inhalation:** No known effect.

### Toxicological Information for Component

	<b>Benzyl alcohol</b>	<b>4-nonylphenol</b>
<b>Toxicity - Oral</b>	LD50 Rat 1230 mg/kg	LD50 Rat 1300 mg/kg
<b>Toxicity - Dermal</b>	LD50 Rabbit > 2000 mg/kg	N/A
<b>Toxicity - Inhalation</b>	N/A	N/A
	<b>Tetraethylenepentamine</b>	<b>2-methylpentane-1,5-diamine</b>
<b>Toxicity - Oral</b>	LD50 Rat 3990 mg/kg	LD50 Rat 1690 mg/kg
<b>Toxicity - Dermal</b>	N/A	LD50 Rat 1280 mg/kg
<b>Toxicity - Inhalation</b>	N/A	LC50 Rat 2900 mg/m3 (1h)
	<b>2,4,6-tri(dimethylaminomethyl)phenol</b>	<b>Triethylenetetramine</b>
<b>Toxicity - Oral</b>	LD50 Rat 1200 mg/kg	LD50 Rat 2500 mg/kg
<b>Toxicity - Dermal</b>	N/A	LD50 Rabbit 850 mg/kg
<b>Toxicity - Inhalation</b>	N/A	N/A

## Section 12. Ecological Information

<b>Ecotoxicity:</b>	No ecotoxicity values for this product. Avoid release into the environment.
<b>Persistence and Degradability:</b>	Not available
<b>Bioaccumulative Potential:</b>	High potential
<b>Mobility in Soil:</b>	Not available
<b>Other Adverse Effects:</b>	Not available

## Section 13. Disposal Considerations

### Waste Disposal Regulation(s) / Operation

Avoid release to the environment. Users need to pay attention to the possible existence of regional or national regulations regarding disposal.

## Section 14. Transportation Information [ADR-UN, DOT, ICAO, IMDG, TDGR]

<b>UN Number:</b>	1760
<b>UN Proper Shipping Name:</b>	Corrosive Liquid, N.O.S. (4-nonylphenol, 2-methylpentane-1,5-diamine)
<b>Hazard Class:</b>	8
<b>Packing group:</b>	II



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## Section 15. Regulatory Information

### Safety, Health and Environmental Regulations for Product

No regulation data for product.

### Safety, Health and Environmental Regulations for Component

#### Benzyl alcohol

Canada: DSL / NDSL: Listed on the Canadian DSL (Domestic Substance List) inventory.  
Listed on the Canadian Ingredient Disclosure List.  
States: Hazardous Substance Right to know list (RTK): Massachusetts. New Jersey. Pennsylvania.

#### Tetraethylenepentamine

Canada: DSL / NDSL: Listed on the Canadian DSL (Domestic Substance List) inventory.  
Listed on the Canadian Ingredient Disclosure List.  
States: Hazardous Substance Right to know list (RTK): Massachusetts. New Jersey. Pennsylvania.

## Section 16. Other Information

**Date of preparation:** March 7, 2018

**Version:** 1.0

**Prepared by:** ECO2 LEVEL

### Other Information Disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

### Glossary:

<b>ACGIH:</b>	American Conference of Governmental Industrial Hygienists.
<b>ADR:</b>	European Road Transport.
<b>CAS:</b>	Chemical Abstracts Service.
<b>DOT:</b>	US Department of Transportation USA.
<b>DSL:</b>	Canadian Domestic Substances List.
<b>EPA:</b>	US Environmental Protection Agency.
<b>ICAO:</b>	International Civil Aviation Organization.
<b>IMDG:</b>	International Maritime Dangerous Goods Code.
<b>LC50:</b>	Lethal concentration that will kill 50 percent of the test animals within a specified time.
<b>LD50:</b>	The dose required to produce the death in 50 percent of the exposed species within a specified time.
<b>N/Ap:</b>	Not applicable.
<b>N/Av:</b>	Not available.
<b>N/D:</b>	Not determined.
<b>NDSL:</b>	Canadian Non-Domestic Substances List.
<b>NIOSH:</b>	National Institute for Occupational Safety and Health.
<b>OSHA:</b>	Occupational Safety and Health Administration, US Department of Labor.
<b>REL:</b>	A recommended exposure limit (REL) is an occupational exposure limit that has been recommended by the United States National Institute for Occupational Safety and Health to the Occupational Safety and Health Administration (OSHA) for adoption as a permissible exposure limit.
<b>RTECS:</b>	Registry of Toxic Effects of Chemical Substances.
<b>SARA:</b>	Superfund Amendments and Reauthorization Act.
<b>STEL:</b>	A short-term exposure limit (STEL) is the acceptable average exposure over a short period of time, usually 15 minutes as long as the time-weighted average is not exceeded.
<b>TDGR:</b>	Transportation of Dangerous Goods Regulations.
<b>TLV:</b>	The threshold limit value of a chemical substance is a level to which it is believed a worker can be exposed day after day for a working lifetime without adverse health effects. Strictly speaking, TLV is a reserved term of the American Conference of Governmental Industrial Hygienists (ACGIH). However, it is sometimes loosely used to refer to other similar concepts used in occupational health and toxicology. TLVs, along with biological exposure indices (BEIs), are published annually by the ACGIH.
<b>TSCA:</b>	Toxic Substances Control Act.
<b>TWA:</b>	A time-weighted average is used to calculate a workers daily exposure to a hazardous substance (such as chemicals, dusts, fumes, mists, gases, or vapors) or agent (such as occupational noise), averaged to an 8-hour workday, taking into account the average levels of the substance or agent and the time spent in the area. This is the guideline OSHA uses to determine permissible exposure limits (PELs) and is essential in assessing a worker's exposure and determining what protective measures should be taken.
<b>UN:</b>	United Nations.