



# Material Safety Data Sheet

Issuing Date 04-May-2011

Revision Date

Revision Number 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** KSY-21-M-1 WATERBORNE PAINT

**Product Code(s)** 981602

**Recommended Use** Traffic paint

**Product Technology** W/B

### Supplier Address

Ennis Paint Inc.  
5910 North Central Expressway  
Suite 1050  
Dallas TX 75206  
T: 800.331.8118  
800.331.8118 (For Technical Inquiries)

**Chemical Emergency Phone Number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### DANGER!

#### Emergency Overview

Harmful by inhalation, in contact with skin and if swallowed

Causes central nervous system depression.

May cause skin, eye, and respiratory tract irritation

May adversely affect liver and kidney.

Cancer hazard

WARNING! This product contains a chemical known in the State of California to cause cancer.

**Appearance** Yellow

**Physical State** Emulsion.

**Odor** Slight, Ammonia

### Potential Health Effects

#### Principle Routes of Exposure

Eye contact. Skin contact. Inhalation.

#### Acute Toxicity

##### Eyes

May cause irritation.

##### Skin

Harmful if absorbed through skin. May cause irritation.

##### Inhalation

Harmful by inhalation. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. Sanding and grinding dust may be harmful if inhaled.

##### Ingestion

Harmful if swallowed. May cause blindness if swallowed. May cause additional affects as listed under "Inhalation".

#### Chronic Effects

Inhalation exposure to respirable levels of crystalline silica may cause respiratory impairment and lung damage. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. Inhalation, ingestion, or skin absorption of methanol can cause blindness.

|                                          |                                                                                                                                                   |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Aggravated Medical Conditions</b>     | Respiratory disorders. Lungs. Skin disorders. Liver disorders. Kidney disorders. Central nervous system. Pre-existing eye disorders.              |
| <b>Interactions with Other Chemicals</b> | Use of alcoholic beverages may enhance toxic effects.                                                                                             |
| <b>Environmental Hazard</b>              | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. See Section 12 for additional Ecological Information. |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name    | CAS-No     | Weight % |
|------------------|------------|----------|
| Methyl alcohol   | 67-56-1    | 5-10     |
| Titanium dioxide | 13463-67-7 | 3-7      |
| Propylene glycol | 57-55-6    | 1-5      |
| 2-Butoxyethanol  | 111-76-2   | 1-5      |
| Quartz           | 14808-60-7 | 0.1-1    |

### 4. FIRST AID MEASURES

|                           |                                                                                                                                              |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye Contact</b>        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.              |
| <b>Skin Contact</b>       | Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.       |
| <b>Inhalation</b>         | Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.                                            |
| <b>Ingestion</b>          | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If symptoms persist, call a physician. |
| <b>Notes to Physician</b> | Treat symptomatically.                                                                                                                       |

### 5. FIRE-FIGHTING MEASURES

|                                                              |                                                                                                                                        |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flammable Properties</b>                                  | Not flammable.                                                                                                                         |
| <b>Flash Point</b>                                           | > 201°F / 93.8°C                                                                                                                       |
| <b>Suitable Extinguishing Media</b>                          | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                                |
| <b>Explosion Data</b>                                        |                                                                                                                                        |
| <b>Sensitivity to Mechanical Impact</b>                      | None                                                                                                                                   |
| <b>Sensitivity to Static Discharge</b>                       | None                                                                                                                                   |
| <b>Protective Equipment and Precautions for Firefighters</b> | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. |

|             |                         |                       |                          |                                        |
|-------------|-------------------------|-----------------------|--------------------------|----------------------------------------|
| <b>NFPA</b> | <b>Health Hazard 1</b>  | <b>Flammability 1</b> | <b>Instability 0</b>     | <b>Physical and Chemical Hazards -</b> |
| <b>HMIS</b> | <b>Health Hazard 2*</b> | <b>Flammability 1</b> | <b>Physical Hazard 0</b> | <b>Personal Protection -</b>           |

**6. ACCIDENTAL RELEASE MEASURES**

|                                  |                                                                                                                                                                                                                            |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>      | Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.                                                                                                                |
| <b>Environmental Precautions</b> | Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.                                                                                                                            |
| <b>Methods for Containment</b>   | Prevent further leakage or spillage if safe to do so.                                                                                                                                                                      |
| <b>Methods for Cleaning Up</b>   | Use personal protective equipment. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Clean up promptly by sweeping or vacuum. Keep in suitable and closed containers for disposal. |

**7. HANDLING AND STORAGE**

|                 |                                                                                                                                                                                                                    |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. |
| <b>Storage</b>  | Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.                                                                          |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name                  | ACGIH TLV                                        | OSHA PEL                                                                                                                                                                                         | NIOSH IDLH                                                                                                   |
|--------------------------------|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 2-Butoxyethanol<br>111-76-2    | TWA: 20 ppm                                      | TWA: 50 ppm<br>TWA: 240 mg/m <sup>3</sup><br>(vacated) TWA: 25 ppm<br>(vacated) TWA: 120 mg/m <sup>3</sup><br>(vacated) S*                                                                       | IDLH: 700 ppm<br>TWA: 5 ppm<br>TWA: 24 mg/m <sup>3</sup>                                                     |
| Methyl alcohol<br>67-56-1      | STEL = 250 ppm<br>TWA: 200 ppm<br>S*             | TWA: 200 ppm<br>TWA: 260 mg/m <sup>3</sup><br>(vacated) TWA: 200 ppm<br>(vacated) TWA: 260 mg/m <sup>3</sup><br>(vacated) STEL: 250 ppm<br>(vacated) STEL: 325 mg/m <sup>3</sup><br>(vacated) S* | IDLH: 6000 ppm<br>TWA: 200 ppm<br>TWA: 260 mg/m <sup>3</sup><br>STEL: 325 mg/m <sup>3</sup><br>STEL: 250 ppm |
| Quartz<br>14808-60-7           | TWA: 0.025 mg/m <sup>3</sup> respirable fraction | TWA: 0.1 mg/m <sup>3</sup> (vacated)                                                                                                                                                             | IDLH: 50 mg/m <sup>3</sup> respirable dust<br>TWA: 0.05 mg/m <sup>3</sup> respirable dust                    |
| Titanium dioxide<br>13463-67-7 | TWA: 10 mg/m <sup>3</sup>                        | TWA: 15 mg/m <sup>3</sup> total dust<br>(vacated) TWA: 10 mg/m <sup>3</sup> total dust                                                                                                           | IDLH: 5000 mg/m <sup>3</sup>                                                                                 |

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

### Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Engineering Measures

Showers  
Eyewash stations  
Ventilation systems

### Personal Protective Equipment

#### Eye/Face Protection

Safety glasses with side-shields.

#### Skin and Body Protection

Protective gloves.

#### Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

### Hygiene Measures

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                   |                           |                                    |                           |
|-----------------------------------|---------------------------|------------------------------------|---------------------------|
| <b>Appearance</b>                 | Yellow.                   | <b>Odor</b>                        | Slight, Ammonia.          |
| <b>Odor Threshold</b>             | No information available  | <b>Physical State</b>              | Emulsion                  |
| <b>pH</b>                         | No information available. |                                    |                           |
| <b>Flash Point</b>                | > 201°F / 93.8°C          | <b>Autoignition Temperature</b>    | No information available. |
| <b>Decomposition Temperature</b>  | No information available. | <b>Boiling Point/Boiling Range</b> | No information available  |
| <b>Melting Point/Range</b>        | No information available  |                                    |                           |
| <b>Flammability Limits in Air</b> | No information available. | <b>Explosion Limits</b>            | No information available. |
| <b>Specific Gravity</b>           | 1.55-1.75                 | <b>Solubility</b>                  | Insoluble                 |
| <b>Evaporation Rate</b>           | No information available  | <b>Vapor Pressure</b>              | No data available         |
| <b>Vapor Density</b>              | No data available         | <b>EPA VOC (g/l)</b>               | <100                      |

## 10. STABILITY AND REACTIVITY

|                                         |                                              |
|-----------------------------------------|----------------------------------------------|
| <b>Stability</b>                        | Stable under recommended storage conditions. |
| <b>Incompatible Products</b>            | None known based on information supplied.    |
| <b>Conditions to Avoid</b>              | None known based on information supplied.    |
| <b>Hazardous Decomposition Products</b> | Carbon oxides. Nitrogen oxides (NOx).        |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.     |

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

|                            |                                                              |
|----------------------------|--------------------------------------------------------------|
| <b>Product Information</b> | No acute toxicity information is available for this product. |
|----------------------------|--------------------------------------------------------------|

### Component Information

| Chemical Name    | LD50 Oral             | LD50 Dermal                                    | LC50 Inhalation                                  |
|------------------|-----------------------|------------------------------------------------|--------------------------------------------------|
| Propylene glycol | 20000 mg/kg ( Rat )   | = 20800 mg/kg ( Rabbit )                       | -                                                |
| 2-Butoxyethanol  | = 470 mg/kg ( Rat )   | = 400 mg/kg ( Rabbit )<br>= 2270 mg/kg ( Rat ) | = 2.21 mg/L ( Rat ) 4 h<br>= 450 ppm ( Rat ) 4 h |
| Methyl alcohol   | 5628 mg/kg ( Rat )    | 15800 mg/kg ( Rabbit )                         | 83.2 mg/L ( Rat ) 4 h<br>64000 ppm ( Rat ) 4 h   |
| Quartz           | 500 mg/kg ( Rat )     |                                                |                                                  |
| Titanium dioxide | > 10000 mg/kg ( Rat ) |                                                | > 6820 mg/m <sup>3</sup>                         |

### Chronic Toxicity

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chronic Toxicity</b> | Inhalation exposure to respirable levels of crystalline silica may cause respiratory impairment and lung damage. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. Inhalation, ingestion, or skin absorption of methanol can cause blindness. |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                        |                                                                                          |
|------------------------|------------------------------------------------------------------------------------------|
| <b>Carcinogenicity</b> | The table below indicates whether each agency has listed any ingredient as a carcinogen. |
|------------------------|------------------------------------------------------------------------------------------|

| Chemical Name    | ACGIH | IARC     | NTP   | OSHA |
|------------------|-------|----------|-------|------|
| Titanium dioxide |       | Group 2B |       | X    |
| 2-Butoxyethanol  | A3    | Group 3  |       |      |
| Quartz           | A2    | Group 1  | Known | X    |

#### **ACGIH: (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

A4 - Not Classifiable as a Human Carcinogen

#### **IARC: (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

#### **NTP: (National Toxicity Program)**

Known - Known Carcinogen

#### **OSHA: (Occupational Safety & Health Administration)**

X - Present

|                             |                                                                  |
|-----------------------------|------------------------------------------------------------------|
| <b>Target Organ Effects</b> | Respiratory system. Central nervous system (CNS). Liver. Kidney. |
|-----------------------------|------------------------------------------------------------------|

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Product Information LC50/96h/Fathead minnows = >750 mg/L

| Chemical Name    | Toxicity to Algae                                         | Toxicity to Fish                                                                                                                                                                                                                                                                                                 | Toxicity to Microorganisms                                                      | Daphnia Magna (Water Flea)                                                               |
|------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Methyl alcohol   | -                                                         | LC50 96 h: 13500 - 17600 mg/L flow-through (Lepomis macrochirus)<br>LC50 96 h: 18 - 20 mL/L static (Oncorhynchus mykiss)<br>LC50 96 h: 19500 - 20700 mg/L flow-through (Oncorhynchus mykiss)<br>LC50 96 h: = 28200 mg/L flow-through (Pimephales promelas)<br>LC50 96 h: > 100 mg/L static (Pimephales promelas) | EC50 = 39000 mg/L 25 min<br>EC50 = 40000 mg/L 15 min<br>EC50 = 43000 mg/L 5 min | -                                                                                        |
| Propylene glycol | EC50 96 h: = 19000 mg/L (Pseudokirchneriella subcapitata) | LC50 96 h: 41 - 47 mL/L static (Oncorhynchus mykiss)<br>LC50 96 h: = 51400 mg/L static (Pimephales promelas)<br>LC50 96 h: = 51600 mg/L static (Oncorhynchus mykiss)<br>LC50 96 h: = 710 mg/L (Pimephales promelas)                                                                                              | EC50 = 710 mg/L 30 min                                                          | EC50 48 h: > 1000 mg/L Static (Daphnia magna)<br>EC50 24 h: > 10000 mg/L (Daphnia magna) |
| 2-Butoxyethanol  |                                                           | LC50 96 h: = 1490 mg/L static (Lepomis macrochirus)<br>LC50 96 h: = 2950 mg/L (Lepomis macrochirus)                                                                                                                                                                                                              |                                                                                 | EC50 24 h: 1698 - 1940 mg/L (Daphnia magna)<br>EC50 48 h: > 1000 mg/L (Daphnia magna)    |

| Chemical Name   | Log Pow |
|-----------------|---------|
| Methyl alcohol  | -0.77   |
| 2-Butoxyethanol | 0.81    |

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

### Contaminated Packaging

Do not re-use empty containers.

| Chemical Name            | RCRA | RCRA - Basis for Listing       | RCRA - D Series Wastes | RCRA - U Series Wastes |
|--------------------------|------|--------------------------------|------------------------|------------------------|
| Methyl alcohol - 67-56-1 |      | Included in waste stream: F039 |                        | U154                   |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name  | California Hazardous Waste |
|----------------|----------------------------|
| Methyl alcohol | Toxic<br>Ignitable         |

## 14. TRANSPORT INFORMATION

|                 |               |
|-----------------|---------------|
| <u>DOT</u>      | Not regulated |
| <u>TDG</u>      | Not regulated |
| <u>MEX</u>      | Not regulated |
| <u>ICAO</u>     | Not regulated |
| <u>IATA</u>     | Not regulated |
| <u>IMDG/IMO</u> | Not regulated |

## 15. REGULATORY INFORMATION

### International Inventories

|             |                                                      |
|-------------|------------------------------------------------------|
| <b>TSCA</b> | All components are listed on the TSCA Inventory.     |
| <b>DSL</b>  | All components are listed either on the DSL or NDSL. |

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

### U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name   | CAS-No   | Weight % | SARA 313 - Threshold Values % |
|-----------------|----------|----------|-------------------------------|
| 2-Butoxyethanol | 111-76-2 | 1-5      | 1.0                           |
| Methyl alcohol  | 67-56-1  | 5-10     | 1.0                           |

### SARA 311/312 Hazard Categories

|                                          |     |
|------------------------------------------|-----|
| <b>Acute Health Hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | Yes |
| <b>Fire Hazard</b>                       | No  |
| <b>Sudden Release of Pressure Hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name  | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ                                           |
|----------------|--------------------------|------------------------------------|----------------------------------------------|
| Methyl alcohol | 5000 lb                  |                                    | RQ= 2270 kg final RQ<br>RQ= 5000 lb final RQ |

**U.S. State Regulations****California Proposition 65**

California Proposition 65

| Chemical Name | CAS-No     | California Prop. 65 |
|---------------|------------|---------------------|
| Quartz        | 14808-60-7 | Carcinogen          |

**U.S. State Right-to-Know Regulations**

| Chemical Name    | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|------------------|------------|---------------|--------------|----------|--------------|
| Propylene glycol | X          | -             | X            | -        | X            |
| 2-Butoxyethanol  | X          | X             | X            | X        | X            |
| Titanium dioxide | X          | X             | X            | -        | X            |
| Methyl alcohol   | X          | X             | X            | X        | X            |
| Quartz           | X          | X             | X            | -        | X            |

**International Regulations**

| Chemical Name    | Carcinogen Status | Exposure Limits                                                                                                            |
|------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------|
| Methyl alcohol   |                   | Mexico: TWA= 200 ppm<br>Mexico: TWA= 260 mg/m <sup>3</sup><br>Mexico: STEL= 250 ppm<br>Mexico: STEL= 310 mg/m <sup>3</sup> |
| 2-Butoxyethanol  |                   | Mexico: TWA 26 ppm<br>Mexico: TWA 120 mg/m <sup>3</sup><br>Mexico: STEL 75 ppm<br>Mexico: STEL 360 mg/m <sup>3</sup>       |
| Quartz           |                   | Mexico: TWA= 0.1 mg/m <sup>3</sup>                                                                                         |
| Titanium dioxide |                   | Mexico: TWA= 10 mg/m <sup>3</sup><br>Mexico: STEL= 20 mg/m <sup>3</sup>                                                    |

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

D1A Very toxic materials

D1B Toxic materials

D2A Very toxic materials

D2B Toxic materials



| Chemical Name   | NPRI |
|-----------------|------|
| Methyl alcohol  | X    |
| 2-Butoxyethanol | X    |

**16. OTHER INFORMATION**

**Prepared By** Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

**Issuing Date** 04-May-2011

**Revision Date**

**Revision Note** Initial Release.

**General Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication and it does not purport to be all inclusive and shall be used only as a guide. We urge each customer or recipient of this MSDS to study it carefully to become aware of and understand the potential hazards associated with the product. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. Any use of the product not in conformance with this MSDS or in combination with any other product or process is the responsibility of the user. Customary precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Remove all soiled and contaminated clothing immediately.

**End of Safety Data Sheet**