



State-Series
MN Waterborne
Traffic Marking Paint

Product Data Sheet

PRODUCT DESCRIPTION

Diamond Vogel's State-Series MN Waterborne Traffic Marking Paint is a high solids and fast-drying striping paint. UC-1515 and UC-3590 meet or exceed the **Minnesota** specification for traffic marking paint.

TYPICAL USES

The State-Series Marking Paint is recommended for marking and striping streets, highways or other traffic surfaces including driveways, parking lots, sidewalks, curbs or airport runways. It may be applied to either concrete or asphalt surfaces by a variety of methods.

COLORS AVAILABLE

UC-1515 White
UC-3590 Yellow

PHYSICAL PROPERTIES(UC-1515)

Resin Type	Acrylic
Clean-up Solvent	Water
Finish	Flat
Solids by Weight	78 %
Solids by Volume	62 %
Wet Film to Achieve DFT	15 mils
Practical Coverage at Recommended DFT ¹	107 ft ² / gallon
4" Line @ 15 mils WFT	320 ft. / gallon
<u>Dry Times</u> ² @ 70° F (21° C) and 50% R.H.	Tack Free less than 5 minutes
VOC's	Less than 150 g/l

SPECIFICATIONS

Concrete
Self Priming

Asphalt
Self Priming

Cinders
Self Priming

For more detailed recommendations, please contact your local Diamond Vogel Sales Representative.

1. Spread rates are estimates based on products volume solids and make no allowance for material loss during application. Actual spread rates may vary dependent on applicator experience, surface porosity and texture.

2. Dry times may vary depending upon temperature, humidity and degree of air movement.

SURFACE PREPARATION

The surface to be coated must be free of any contaminant that will prevent the paint from adhering to the surface. Oil, grease, loose paint chips, gravel, salt films and curing membranes may all interfere with the adhesion of the coating. The surface should be swept clean of all loose contaminants. Visible stains of oils or dirt should be washed from the surface prior to coating. Slick or glossy surfaces, such as hard steel troweled concrete should be abraded to provide surface profile for the coating to adhere to.

TEST METHODS

Weight per Gallon	ASTM D 1475
Viscosity	ASTM D 562
Fineness of Grind	ASTM D 1210
Total Solids	ASTM D 2369
Total Pigment	ASTM D 2371
Titanium Dioxide	ASTM D 4563; D 1394
Dry Time (12 mils wet)	ASTM D 711 (modified)
Daylight Directional Reflectance	ASTM D 2805
Contrast Ratio	ASTM D 2805
Bleeding Ratio	ASTM D 969
Color	ASTM D 2805

APPLICATION

-) Stir material prior to application.
-) Equipment must be clean prior to start. Flush airless lines with water or N-7025.
-) Apply with conventional or airless spray equipment.
-) Small areas may be brushed or rolled.
-) Apply 1 coat 15 mils wet film thickness.
-) Allow to dry 5 minutes before allowing traffic to drive over this coating.
-) This coating has been successfully applied through a heated system up to temperatures of 140° F. Heating the coating will decrease the dry time, if surface temperatures, relative humidity, and air movement remain within the requirements for proper application.
-) DO NOT THIN

ENVIRONMENTAL VARIABLES

Apply when air and surface temperatures are above 50° F. Lower surface temperatures and high humidity will slow the speed of dry. Surface temperatures below 70° F and/or relative humidity greater than 80% may require longer curing times prior to bearing traffic.

CLEAN-UP

Clean up spills immediately with soap and warm water or N-7025. Clean hands and tools immediately after use with soap and warm water or N-7025. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment.

CAUTIONS

- Do Not Freeze
- Do not apply below 50° F.
- Do not take internally
- Use with adequate ventilation
- KEEP OUT OF REACH OF CHILDREN

*WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the national Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Limited Warranty

The technical data and suggestions for use contained in this document are true and correct to the best of our knowledge at the date of issuance. The statements of this document do not constitute a warranty, expressed or implied, as to the performance of these products. Since Diamond Vogel Paints does not control the application of its products, or the condition of the surfaces to which they are applied, Diamond Vogel Paint's liability will under no circumstances exceed replacement of the product.

SAFETY DATA SHEET

Revision Date 04-Jun-2015

Version 1

1. IDENTIFICATION

Product identifier

Product Name Yellow Traffic High Solids L/F

Other means of identification

Product Code UC3590-955
SKU(s) UC3590-825, UC3590-825, UC3590-955

Recommended use of the chemical and restrictions on use

Recommended Use No information available.
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Diamond Vogel Paint
1020 Albany Place SE
Orange City, IA 51041
Phone: 712-737-4993
Fax: 712-737-4997

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 1

Emergency Overview

Danger

Hazard statements

May cause cancer
Causes damage to organs



Appearance No information available

Physical state liquid

Odor No information available

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

- May be harmful if swallowed
- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

Unknown acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Calcium carbonate	1317-65-3	30 - 60	*
Methanol	67-56-1	1 - 5	*
Texanol	25265-77-4	1 - 5	*
Titanium dioxide	13463-67-7	1 - 5	*
Crystalline Silica	14808-60-7	0.1 - 1	*
Heavy Paraffinic Distillate	64742-54-7	0.1 - 1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium carbonate 1317-65-3	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust

Methanol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Crystalline Silica 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	(vacated) TWA: 0.1 mg/m ³ respirable dust : (30)/(%SiO ₂ + 2) mg/m ³ TWA total dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust

NIOSH IDLH *Immediately Dangerous to Life or Health*

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

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

- Eye/face protection** No special technical protective measures are necessary.
- Skin and body protection** No special technical protective measures are necessary.
- 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.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	No information available
Appearance	No information available	Odor threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	9.7+	
Melting point/freezing point	No information available	
Boiling point / boiling range	>= 26 °C / 79 °F	
Flash point	> 94 °C / > 201 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.65	
Water solubility	No information available	

Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	13.76 lbs/gal
Bulk density	No information available
Percent solids by weight	77.6%
Percent volatile by weight	3.5%
Percent solids by volume	62.1%
Actual VOC (lbs/gal)	0.5
Actual VOC (grams/liter)	57
EPA VOC (lbs/gal)	0.7
EPA VOC (grams/liter)	83
EPA VOC (lb/gal solids)	0.8

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Calcium carbonate 1317-65-3	= 6450 mg/kg (Rat)	-	-

Methanol 67-56-1	= 6200 mg/kg (Rat)	= 15800 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h = 64000 ppm (Rat) 4 h
Texanol 25265-77-4	= 3200 mg/kg (Rat)	> 15200 mg/kg (Rat)	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Crystalline Silica 14808-60-7	= 500 mg/kg (Rat)	-	-
Heavy Paraffinic Distillate 64742-54-7	> 15 g/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	X
Crystalline Silica 14808-60-7	A2	Group 1	Known	X
Heavy Paraffinic Distillate 64742-54-7	A2	Group 1	-	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organ Effects

Central nervous system, Eyes, Gastrointestinal tract (GI), lungs, Respiratory system, Skin.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life with long lasting effects

96.05% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methanol 67-56-1	-	28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through	-

Texanol 25265-77-4	18.4: 72 h Pseudokirchneriella subcapitata mg/L EC50	30: 96 h Pimephales promelas mg/L LC50	95: 96 h Daphnia magna mg/L LC50
Heavy Paraffinic Distillate 64742-54-7	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Methanol 67-56-1	-0.77
Texanol 25265-77-4	3.47

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

US EPA Waste Number

U154

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methanol 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 Status
Methanol 67-56-1	Toxic Ignitable

14. TRANSPORT INFORMATION**DOT**

Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL/NDSL	Complies *
EINECS/ELINCS	Does not comply *
ENCS	Does not comply *
IECSC	Complies *
KECL	Complies *

PICCS Complies *
AICS Complies *

* This product contains an unknown chemical, therefore, this product's compliance to the inventory list is NOT DETERMINED

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

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	SARA 313 - Threshold Values %
Methanol	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methanol 67-56-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Methanol - 67-56-1	Developmental
Titanium dioxide - 13463-67-7	Carcinogen
Crystalline Silica - 14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts
Calcium carbonate 1317-65-3	X	X
Methanol 67-56-1	X	X
Titanium dioxide 13463-67-7	X	X
Crystalline Silica 14808-60-7	X	X
Talc (powder) 14807-96-6	X	X

Chemical Name	Pennsylvania
Calcium carbonate 1317-65-3	X

Methanol 67-56-1	X
Titanium dioxide 13463-67-7	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Hazardous air pollutants (HAPS) content

LIST OF HAZARDOUS AIR POLLUTANTS SUBJECT TO THE PROVISIONS OF THE CLEAN AIR ACT, TITLE I SECTION 112 'National Emission Standards for Hazardous Air Pollutants':

Chemical Name	Weight % of HAPS in Product	Pounds HAPS / Gal Product
Methanol 67-56-1	1.81%	0.25

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 1	Flammability 1	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 1 *	Flammability 1	Physical hazards 0	Personal protection X

Chronic Hazard Star Legend * = Chronic Health Hazard

Revision Date 04-Jun-2015

Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance 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 materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

End of Safety Data Sheet