

General-Series

Cold Weather Waterborne

Traffic Marking Paint

Product Data Sheet

PRODUCT DESCRIPTION

Diamond Vogel's General-Series Cold Weather Traffic Marking Paint is a high solids and fast-drying traffic marking paint. It is designed as an extended seasonal range product which can be applied at lower temperatures than the standard latex paint and dries quickly to no track conditions.

UC-1525 and UC-3595 meet or exceed Federal Specification TT-P-1952 E & F, Type I & II.

TYPICAL USES

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

COLORS AVAILABLE

UC-1525 White UC-3595 Yellow

PHYSICAL PROPERTIES (UC-1525)

Standard Application

Resin Type Cold Weather Acrylic Clean-up Solvent Water
Finish Flat
Solids by Weight 78 %
Solids by Volume 62 %

Wet Film to Achieve DFT 15 mils

Theoretical Coverage

Recommended DFT¹ 107 ft² / gallon 4" Line @ 15 mils WFT 320 ft. / gallon

Dry Times²

@ 70° F (21° C) Tack Free less than

and 50% R.H. 5 minutes

VOC's less than 150 g/l

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.

SPECIFICATIONS

Concrete

Self Priming

Asphalt

Self Priming

Cinders

Self Priming

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

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 mile wet)	ASTM D 711 (modified)

Dry Time (12 mils wet)

Daylight Directional Reflectance

ASTM D 2805

ASTM D 2805

Contrast Ratio ASTM D 2805
Bleeding Ratio ASTM D 969
Color ASTM D 2805

^{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. When compared to standard latex paint, these products indicate improved adhesion to oily surfaces.

APPLICATION

- Stir material prior to application.
- J Equipment which was used to spray waterborne traffic paint may be run empty of paint and then filled with the low temperature paint. If equipment needs to be cleaned prior to start, flush paint lines with water or N-7025 until clear.
- Apply with conventional or airless spray equipment.
- Small areas may be brushed or rolled.
- Apply 1 coat 15 mils WFT.
- 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 110° F. Heating the coating will decrease the dry time.
- Clean up all equipment with clean water or N-7025.
- All equipment surfaces which come in contact with the paint should be manufactured from stainless steel, plastic, and non-reactive surfaces. Galvanized steel, brass, copper, or aluminum will react with this product and cause equipment malfunction. Mild steel should also be avoided.
- DO NOT THIN

ENVIRONMENTAL VARIABLES

These products were developed for use when air and surface temperature fall below 50°F (the minimum application temperature of the standard latex). They are available during the spring and the fall season in order to extend the striping season. Increase in surface moisture will decrease durability. Painting on a cold dry day which is followed by days of dry conditions may produce a film which is more durable than a day above 32°F followed by damp conditions. Because environmental and road conditions vary greatly during the late fall and early spring, the durability of the line will vary more than lines painted during good weather conditions, dry and above 50°F. Therefore, it is recommended to limit the striping in low temperature to an as needed basis. Protect the product from freezing while in storage. During application, the paint should be not allowed to get cold because that would raise the viscosity of the paint and make it hard to pump. Circulating the paint will help to keep the paint temperature up and paint viscosity lower. These products will solidify at approximately Do not apply paint when temperature is near or below the dew point. These products should be applied within 6 months of manufacture.

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 35° 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 11-Nov-2016 Version 2

1. IDENTIFICATION

Product identifier

Product Name White Low Temp. Traffic L/F

Other means of identification

Product Code UC-1525 SKU(s) None

Recommended use of the chemical and restrictions on use
Recommended Use
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	*
Titanium dioxide	13463-67-7	3 - 7	*
Methanol	67-56-1	1 - 5	*
Texanol	25265-77-4	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 materialsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name ACGIH TLV		OSHA PEL	NIOSH IDLH
Calcium carbonate	Calcium carbonate -		TWA: 10 mg/m ³ total dust
1317-65-3			TWA: 5 mg/m ³ respirable dust
		(vacated) TWA: 15 mg/m³ total dust	
		(vacated) TWA: 5 mg/m³ respirable	
Titanium dioxide TWA: 10 mg/m ³		TWA: 15 mg/m ³ total dust	IDLH: 5000 mg/m ³
13463-67-7	_	(vacated) TWA: 10 mg/m³ total dust	-

Methanol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³
Crystalline Silica 14808-60-7	TWA: 0.025 mg/m³ respirable particulate matter	TWA: 50 μg/m³ TWA: 50 μg/m³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m³ respirable dust: (250)/(%SiO2 + 5) mppcf TWA respirable fraction: (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ 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 protectionNo 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

AppearanceNo information availableOdorNo information availableColorNo information availableOdor thresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH values 9.7pH

Melting point/freezing point

No information available

Boiling point / boiling range

>= 64 °C / 147 °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:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available

Specific Gravity 1.67

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

Other Information

Softening pointNo information availableMolecular weightNo information availableVOC Content (%)No information available

Density 13.95 lbs/gal

Bulk density No information available

Percent solids by weight 78.0% Percent volatile by weight 4.1% Percent solids by volume 62.3% Actual VOC (lbs/gal) 0.6 Actual VOC (grams/liter) 67.9 EPA VOC (lbs/gal) 8.0 EPA VOC (grams/liter) 96.7 EPA VOC (lb/gal solids) 0.9

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)	-	-
Titanium dioxide 13463-67-7	> 10000 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)	> 3.55 mg/L (Rat) 6 h
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

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo 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	Known	Х

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
STOT - single exposure
STOT - repeated exposure
No information available.
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

95.22% of the mixture consists of components(s) of unknown hazards to the aquatic environment

	Chemical Name	Algae/aquatic plants	Fish	Crustacea
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г		1	1	
-	Methanol	-	19500 - 20700: 96 h Oncorhynchus	-
67-56-1			mykiss mg/L LC50 flow-through	
			100: 96 h Pimephales promelas	
1			mg/L LC50 static 13500 - 17600: 96	
-			h Lepomis macrochirus mg/L LC50	
			flow-through 28200: 96 h	
1			Pimephales promelas mg/L LC50	
1			flow-through 18 - 20: 96 h	
1			Oncorhynchus mykiss mL/L LC50	
1			static	
Texanol 18.4: 72 h Pseudokirchneriella 30		30: 96 h Pimephales promelas mg/L	95: 96 h Daphnia magna mg/L LC50	
1	25265-77-4	subcapitata mg/L EC50	LC50	, ,
Ī	Heavy Paraffinic Distillate	-	5000: 96 h Oncorhynchus mykiss	1000: 48 h Daphnia magna mg/L
	64742-54-7		mg/L LC50	ĖC50

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 wastesDisposal 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	-	Included in waste stream:	-	U154
67-56-1		F039		

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	Toxic	
67-56-1	Ignitable	

14. TRANSPORT INFORMATION

DOT Not regulated

15. REGULATORY INFORMATION

International Inventories

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

Legend:

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

DSL/NDSL - 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	5000 lb	-	RQ 5000 lb final RQ
67-56-1			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65	
Titanium dioxide - 13463-67-7	Carcinogen	
Methanol - 67-56-1	Developmental	
Crystalline Silica - 14808-60-7	Carcinogen	
Ethylene Glycol - 107-21-1	Developmental	

U.S. State Right-to-Know Regulations

Chemical I	lame	New Jersey	Massachusetts
Calcium car	oonate	X	X
1317-69	5-3		

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

Titanium dioxide 13463-67-7	X	Х
Methanol 67-56-1	X	Х
Crystalline Silica 14808-60-7	X	X

Chemical Name	Pennsylvania
Calcium carbonate 1317-65-3	X
Titanium dioxide 13463-67-7	X
Methanol 67-56-1	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	2.14%	0.30
67-56-1		

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

NFPA Health hazards 2 Flammability 1 Instability 0 Physical and Chemical

Properties -

Health hazards 2 * Flammability 1 Physical hazards 0 Personal protection X

Chronic Hazard Star Legend *= Chronic Health Hazard

Revision Date 11-Nov-2016

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